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TRANSACTIONS

OF THE

AMERICAN PHILOLOGICAL ASSOCIATION,

1884.

I. — *The Genitive Case in Sophokles.*

BY THOMAS D. GOODELL, PH. D.,

PUBLIC HIGH SCHOOL, HARTFORD, CONN.

I.

ON pedagogical as well as on other grounds the uses of the Greek genitive need to be more thoroughly understood, and more clearly presented in the elementary grammars; for no department of Greek syntax is more productive of confusion of thought in young pupils. The grammars most in use differ greatly in their classification and in the statement of principles. Here, as elsewhere, categories based originally on mistaken notions are still retained, for the supposed comfort of the learner, after their reason for existence has long been recognized as illusory. Careful statement, with accompanying statistics, of the actual usage of the case, from Homer down, is urgently needed. It is the aim of this paper to give such a statement with reference to Sophokles. The classification employed will be different in some respects from others which have been widely adopted; and will be more or less superior to them, it is hoped, because according more closely with the historical development of the case. And, in particular, the ablatival uses of the genitive will be shown to be more numerous, and in some directions more clearly defined, in Sophokles at least, than the grammars would lead one to suppose.

Before proceeding farther, a word may be said in regard to certain restrictions adhered to in this paper, and in regard to the method of recording the facts observed. In the first

place, the fragments are not included in this survey, except incidentally. And this for two reasons: chiefly because they offer nothing which would materially affect the conclusions derived from the rest of Sophokles, but also because to include them would require an entirely disproportionate amount of textual discussion. What we are seeking now is primarily the general proportions of Sophoklean usage. The entire plays give these sufficiently, even if the text of the fragments did not present special difficulties. But the ratio of doubtful or corrupt lines to sound ones in the fragments is of course much the greater; and it would not be worth while to make elaborate studies of the text of the worst lines in an author — especially when the investigator's decisions would carry with them no weight unless accompanied by a full account of his reasoning — merely in order to determine whether a given construction, common everywhere, occurs, say, three hundred or three hundred and one times. A few points of special interest in the fragments will be mentioned in their natural connection. In the entire plays, also, variations in text are not touched upon, except where the usage is peculiar, or where a single example would affect statistics considerably. The text followed is that of Schneidewin as revised by Nauck, and references are made to the following editions of the separate plays: Ai., 7th ed., 1877; O. T., 7th ed., 1876; O. K., 7th ed., 1878; Ant., 8th ed., 1880; El., 5th ed., 1877; Tr., 5th ed., 1880; Phil., 7th ed., 1876. Lyric references — that is, to all lines not in trimeter or tetrameter dialogue — are distinguished by heavy-faced numerals. Further, the genitives themselves are counted, not the governing words; a word attracted into the genitive is counted and assigned to the governing word on which the attracting genitive depends; but appositives are not counted.

In any study of the Greek genitive we must constantly recognize the fact that a part of the Indo-European ablative has become identical with it in form. So far as can be done with certainty, or with a high degree of probability, these cases should be separated, and treated as two. It is true, before the language reached that stage which appears in Homer

the union had become, in some common constructions, so complete that the line of demarcation is obliterated. Or, more fully, we may say that, even in Homer, there occur side by side, contemporaneously, survivals from all along the line of development from Indo-European separateness in form and usage to complete coalescence in form and confusion of usage. But an accidental identity in form should not lead us to confound constructions totally different in origin and nature. Accordingly, the genitives in Sophokles will be here divided into three classes, to be taken up in their order: first, true genitives; secondly, ablatival genitives; thirdly, genitives whose origin and development cannot at present be traced with certainty, or a high degree of probability. However, it is not to be overlooked that the first two classes run into the third perplexingly,—indeed, the third is in part a sort of catch-all for the remnants,—and that any two observers may differ here and there as to which way the fluctuating line of probability inclines. Furthermore, the prepositions, which occur with each class of genitives, will most conveniently be treated last.

II.

The true genitive is originally adnominal; that is, its primary function is to limit the meaning of a substantive. Its other functions have grown out of this by one extension after another, sometimes traceable, sometimes not. The case-ending may be said to denote merely that some relation exists between the genitive and its noun; the nature of that relation is in no sense expressed by the case-ending, but is determined wholly by the context and by the nature of the two things named. All this merely paraphrases the statement of Whitney (Sanskrit Gr., § 294): "The proper value of the genitive is adjectival; it belongs to and qualifies a noun, designating something belonging to the latter in a manner which the nature of the case, or the connection, defines more nearly."

In Sophokles, as elsewhere, this original adnominal genitive constitutes a very large and a fairly distinct class. When, however, we attempt to subdivide this class into genitives

subjective, objective, partitive, genitives of possession, material, specification, etc., we at once stumble upon perplexities. Let any one take a hundred consecutive examples from any writer and try to put each one in its appropriate pigeonhole. The partitions have to come out immediately. Many examples belong in two or three at once; more still will not fit any. The simple experiment proves the impossibility of making such subdivisions. The reason is that the relations actually subsisting between things connected in the genitive construction include about all the relations which ever subsist between separate entities. At any rate, those relations are so "flexible, changeable, vague, and multiform and doubtful," — to make a special application of Clough's words, — that any complete subdivision of the adnominal genitive on this basis is impracticable. All the varieties to which the grammars give separate names appear frequently in Sophokles, but statistics cannot be given. Nor, if possible, would such subdivision be of much profit. It would add nothing to our understanding of the nature of the case, little to our knowledge of the history of the case, nothing to our understanding of the thought of a Greek author. As to the last assertion let us examine illustrations in our own language. For nearly all the categories of the adnominal genitive laid down in the grammars may be perfectly illustrated by Shakespearian and other good English usage. Very brief search and consideration furnish the following examples.

Subjective genitive: "*Night's* predominance"; "*ruin's* wasteful entrance"; "without *my* stir"; "*his* present death"; "the *sun's* return." Objective genitive: "Fought against *my* captivity"; "every one did bear *thy* praises in his *kingdom's* great defence"; "labored in his *country's* wreck"; "in our *country's* purge"; "thy personal venture in the *rebels'* fight." Genitive of measure or value: "Grief of an *hour's* age"; "an *hour's* delay"; "a *fortnight's* space"; "a *moment's* hesitation"; "a *year's* time." Genitive of the whole: "The *house's* top"; "a tale *whose* lightest word"; "my *heart's* core." Genitive of specification: "*Sinai's* mount"; "*Nebo's* lonely mountain." Genitive of connection,

in family, state, etc.: "The *Norways'* king"; "*Bellona's* bridegroom"; "*John's* father, son," etc.

These and similar lists might be almost indefinitely extended, and the genitive of possession is too common to need mention. There are also an endless number of genitives which elude classification as absolutely as many in Greek. Note, for example, the following: "A *summer's* cloud"; "*heaven's* breath"; "this *night's* great business"; "each *day's* life"; "*life's* feast"; "my *sceptre's* awe." True, some of these and others like them may be forced into various categories; but such forcing is not classification. Surely, so far as pupils are concerned, no practical and sufficient end would be served by requiring them to attempt or think of any such dissection of the adnominal genitive in Shakespeare.[1] Then why in Sophokles? At most the terms "subjective," etc. can be useful only occasionally, in case of real ambiguity, as a convenient mode of indicating the actual meaning of the passage.

Under this simplest type of genitive, depending on a noun or pronoun, are included 46.3+ per cent of all the genitives in Sophokles, and 86.3+ per cent of the true genitives. The extensions and offshoots of this type, familiar as most of them are, common in all writers, and in great part pro-ethnic in origin, are thus seen to be comparatively infrequent.

We should expect in poetry some combinations of nouns in the genitive construction which would be strange in prose. The poet's preference for a concise mode of expression may lead him to select a genitive instead of a prepositional phrase or a clause. And in particular Sophokles's fondness for a somewhat artificial style, for a new and artistic rather than a familiar turn of words, tends to variations from prose usage. Hence we find examples like these: *κλέπτης αὐτοῦ ψηφοποιός*, Ai. 1135; *τόλμης πρόσωπον*, O. T. 533; *σχολῇ κακοῦ*, O. T. 1286; *λυγρῶν πόνων ἱκετῆρες*, O. T. 185; *ἄρρητ'*

[1] Of course, in giving English genitives, *of* has not been regarded as a genitive sign, any more than *ἀπό* or any other preposition would be so regarded in Greek.

ἀρρήτων, O. T. **465**; *δόκησις λόγων*, O. T. **681**; *μῆνιν πράγματος*, O. T. **699**; *θανάτων πύργος*, O. T. **1199**; *ἕδρας γῆς*; O. K. 45; *ὁ Θήβας ἐλελίχθων*, Ant. **153** (in which example the peculiarity lies merely in the fact that the participle is made a substantive); *νόσων φυγάς*, Ant. **364**; *μῦθος φίλων* ('talk about friends'), Ant. 11; *θρήνων ᾠδάς*, El. **88**; *στέρνων πληγάς*, El. **90**; *φάσμα νυκτός*, El. **501**; *τἀκείνου σωτήρια* ('means of safety proceeding from him'), El. 924; *ὠδῖνας αὐτοῦ* ('about him'), Tr. 42; *εὐμάρεια πόρου*, Phil. **704**.

Sometimes the noun with which the genitive is connected is omitted, or is continued from a preceding phrase, to which the genitive is joined by some conjunction, most often *ὡς*: e. g. *φρενός*, Ai. 482; *θεοῦ*, Ai. 998; *κώδωνος*, Ai. 17; *φεύγοντος*, Ant. 256. (It may be said here that this use of *ὡς*, *ὥσπερ*, *εἴπερ* appears several times in Sophokles connecting similar constructions under other classes of genitives.)

Sometimes, as in prose, the genitive is put alongside of a possessive adjective, as if agreeing with a genitive implied in that possessive: as, *θανόντος*, Ai. 1016; *μόνης*, Tr. 775.

Then there are many occurrences of the genitive dependent on a pronoun, as *τίς*, *τὶς*, *οὐδείς*, *μηδείς*, *ὅστις*, some form of the article followed by *μέν* or *δέ*, or even on the article alone in some survivals of its earlier pronominal use, or even, finally, on a pronoun understood. Most of these are simple enough, and common in prose and poetry of all periods. Examples are: *ἐν τῷ πράγματος*, Ai. 314; *ἐν τῷ συμφορᾶς*, Ant. 1229; *ὅστις ὑμῶν*, O. T. 224; *θεῶν του*, O. T. 42; *ἐς τοσοῦτον ἐλπίδων*, O. T. 771; *τοὐκεῖθεν ἄλσους*, O. K. 505.

A noun or pronoun, with a genitive dependent on it, may have an adjective in the superlative degree connected with it, either directly, as an attributive, or through a verb, as a predicate adjective, to denote that one individual or certain individuals of a class possess a quality in a higher degree than any others of the class. We may call this the genitive with superlatives; but it evidently belongs primarily with the noun or pronoun; and this even when the superlative itself, by omission of its noun, becomes a sub-

stantive. Examples of this sort, then, are to be classed as adnominal; and the case is the same with genitives accompanying a superlative adverb, the genitive depending on a noun or pronoun, expressed or understood, and the adverb belonging to a verb, adjective, or other adverb. The reason for here separating these examples from those just considered is that the grammars so separate them; and in fact the presence of the superlative marks the examples distinctly enough to justify the practice. In its nature prosaic, this construction appears but eighty-three times in the seven plays (2.0+ per cent of all, 3.8— per cent of true genitives), and lyric lines furnish less than their quota. Indeed, the genitive with a superlative adverb nowhere occurs in lyric metre. A few examples are cited: *στρατοῦ*, Ai. 502; *πημονῶν*, O. T. 1230; *τῶνδε*, Tr. 312. In two instances the genitive with superlatives is probably to be regarded as ablatival, of the same nature as the genitive with comparatives, and is counted under that head. The examples are *τῶν προτέρων*, Ant. **100** ff.; *τῶν ἐντόπων*, Phil. **1171**.

A number of common adverbs retain enough of their earlier force as nouns to admit, in dependence on them, a genitive of the whole. There occur in Sophokles thirty-four adnominal genitives of this description (0.8+ per cent of all, 1.6— per cent of true genitives) with the adverbs *ἄλλῃ, ἔνθα, ἐνθάδε, ἵνα, μηδαμοῦ* (?), *οἵ, οἵπερ, ὅποι, ποῖ, ποῦ, πού, ὡς*. E.g., with *ἄλλῃ*, Tr. 906; with *ἔνθα*, Ai. 659; with *ἐνθάδε*, Phil. 899; with *ἵνα*, O. T. 367 and 413; with *μηδαμοῦ*, [Phil. 256]; with *οἵ*, El. 1035; with *οἵπερ*, El. 404; with *ὅποι*, El. 922; with *ποῖ*, O. T. **1309**; with *ποῦ*, Ai. 102; with *πού*, Phil. **1124**; with *ὡς*, O. T. 345.

The adnominal genitive is used by Sophokles in the predicate with the verbs *εἰμί, γίγνομαι, νομίζομαι, ὀνομάζομαι, ἐπονομάζομαι, φαίνομαι, γράφομαι, καλοῦμαι, ἐπακούω, ποιοῦμαι, κυρῶ, ὄπωπα, εἶπον, ὑπάρχει* (?), *αὐδῶμαι*. Of these *εἰμί*, as everywhere, is the most common. The following are the examples with the other verbs: *ὁ νοῦς ὅταν | αὐτοῦ γένηται*, O. K. 660; *πατρὸς | ἄλλου γενοῦ του*, Tr. 1205. In Phil. 305 f., *πολλὰ γὰρ τάδε | ἐν τῷ μακρῷ γένοιτ' ἂν ἀνθρώπων*

χρόνῳ, ἀνθρώπων is commonly taken with *χρόνῳ*. But the objection of Blaydes, quoted with approval by Nauck, that with *ἀνθρώπων* we should expect *βίῳ* rather than *χρόνῳ* is well founded; and in reading *ἀνθρώπῳ* Blaydes at least gives the meaning of the passage, which is, 'Many events of this sort might in the long stretch of time fall to the lot of men.' But why not retain *ἀνθρώπων* as a predicate genitive after *γένοιτο*, which stands close beside it? Although the idea is ordinarily expressed by *γίγνομαι* with the dative, yet the predicate genitive is not unnatural in itself, and is no more unparalleled than *ὅταν αὑτοῦ γένηται*, O. K. 660, in the sense of 'become master of itself,' or 'come to itself.' It is certainly less hard to explain thus than to put *ἀνθρώπων* with *χρόνῳ*. *τοῦ θεῶν νομίζεται*, O. K. 38; *οὐ τοῦ κρατοῦντος ἡ πόλις νομίζεται*, Ant. 738; *ὁ τῆς ἀρίστης μητρὸς ὠνομασμένος*, Tr. 1105; *πατρὸς | τὴν δυστάλαιναν δαΐτ' ἐπωνομασμένην*, El. 283; *ὡς οὐκέτ' ὄντος γὰρ συμβόλαιά σου | ἐφαίνετο*, Phil. 884; *τὸν ἐκ θεῶν | φανέντ' ἄναγνον καὶ γένους [τοῦ Λαΐου]*, O. T. 1383. This example is not included in the count, for the text cannot possibly be right, whatever be the true correction. *οὐ Κρέοντος προστάτου γεγράψομαι*, O. T. 411; *Παλλάδος καλούμεναι | Ἀθῆναι*, O. K. 107; *καλοῦ τῆς μητρός*, El. 367; *οἷον ἐγὼ γᾶς Ἀσίας οὐκ ἐπακούω*, O. K. 695; *ποιοῦ σεαυτῆς*, Ant. 547; *ἀδελφῆς . . . | κυρεῖ*, Ant. 486; *ὁποῖον οὐ | τῶν σῶν τε κἀμῶν οὐκ ὄπωπ' ἐγὼ κακῶν*, Ant. 6; *ποίας ὑμᾶς πατρίδος ἢ γένους εἰπών*, Phil. 222; *σχῆμα Ἑλλάδος | [στολῆς ὑπάρχει]*, Phil. 223; *οἶσθα γὰρ ὧν αὐδῶμαι*, Phil. 852.

There are in addition nine passages, furnishing fourteen genitives, which require fuller consideration. The genitives are certainly adnominal in origin, and may best be treated in connection with the predicate genitive. The passages are as follows: *ποίου κέκραγας ἀνδρὸς ὧδ' ὑπέρφρονα; | ποῦ βάντος ἢ ποῦ στάντος οὗπερ οὐκ ἐγώ;* Ai. 1236 f.; *ποίου γὰρ ἀνδρὸς τήνδε μηνύει τύχην;* O. T. 102; *μαντεῖα | ἃ τοῦδ' ἐχρήσθη σώματος*, O. K. 355; *κεἰ δείν' ἐπερρώσθη λέγειν | τῆς σῆς ἀρωγῆς*, O. K. 662; *τοῦ κασιγνήτου τί φής, | ἥξοντος ἢ μέλλοντος;* El. 317; *τοῦ με τήνδ' ἐφίστασαι βάσιν;* Tr. 339; *τῷ παιδὶ φράζω τῆς τεχνωμένης τάδε*, Tr. 928;

τῆς μητρὸς ἥκω τῆς ἐμῆς φράσων ἐν οἷς | νῦν ἔστιν, Tr. 1122; *Φ. ἀναξίου μὲν φωτὸς ἐξερήσομαι, | γλώσσῃ δὲ δεινοῦ καὶ σοφοῦ, τί νῦν κυρεῖ. N. ποίου δὲ τούτου πλήν γ' Ὀδυσσέως ἐρεῖς;* Phil. 439 ff.

In all these except Tr. 339 the meaning is just about what would be expressed were *περί* used; but no one would now explain them by saying *λείπει περί*, or, in Tr. 339, *λείπει ἕνεκα*. Nor is it quite satisfactory to say that *ποίου ἀνδρός*, for instance, depends directly on *ὑπέρφρονα*, still less on *κέκραγας*. Is not a clue to the right explanation to be found in such varieties of the predicate genitive as *πατρίδος*, Phil. 222; *κακῶν*, Ant. 6; *γᾶς*, O. K. 695, quoted above? Then compare with these such expressions as *τί τόδε λέγεις;* or *οἷόν τι ποτὸν τόδε νηῦς ἐκεκεύθει*, Hom. *ι* 348, showing a not infrequent predicate accusative. In the nine passages above quoted, the genitive is to be regarded as a development of the predicate genitive; and the force of Ai. 1236 may be roughly given thus: 'What sort of a man is he with whose name you clamorously connect such haughty words?' So O. T. 102 might be rendered, 'Whose does he, by his announcement, declare this fate to be?' So O. K. 355, 'Prophecies which were, by utterance of the oracle, declared as mine,' i.e. 'as having reference to me.' In like manner the other passages might be rendered. In each instance, except Tr. 339, we have a verb of declaring, a direct object (or with the passive a subject), and a genitive, which in several instances does not stand very near the object. In O. K. 355, and in some others, the genitive might perhaps be regarded as connected directly with the noun or pronoun; but in Ai. 1236 and O. T. 102 the genitive cannot be so construed; and the examples all seem to belong together. The most doubtful ones are Tr. 1122 and Phil. 439, where it is difficult to say with certainty that the genitive does not depend directly on the indirect question. Then in Tr. 339 it is difficult to say whether a still further extension of the idiom has taken place, in that the verb of declaring is only implied, or the genitive should be taken to modify the rest of the sentence as a whole. This genitive seems to be a good deal like the geni-

tive of price, which also is probably a development of the predicate genitive. And besides, in most of the passages under consideration the genitive has come to have the aspect of an adverbial modifier of the predicate, and from being so regarded may well have been used in connections which completely obscured the origin of the locution. In other words, we may have here instances of the beginnings of a distinct function of the genitive.

With these apparently belong seven examples of the genitive with verbs of hearing and learning (i. e. having something told one), where the genitive is to be translated *about*. They are: *τούτων ἀκοῦσαι*, O. K. 485; *κλύων σοῦ*, O. K. 307; *κλύουσαν | ὀνειράτων*, El. **481**; *κλύουσα παιδός*, Ant. 1182; *ἔραμαι πυθέσθαι . . . τᾶς δειλαίας . . . | ἀλγηδόνος*, O. K. **514**; *ὧν πεύσει*, El. 35; *σὲ πατρὸς οὕτω δαρὸν ἐξενωμένον | τὸ μὴ πυθέσθαι ποῦ ἔστιν αἰσχύνην φέρειν*, Tr. 65. This genitive is certainly more nearly akin to those discussed immediately above, than it is to the common genitive of the thing heard with these and like verbs.

Another special development of the predicate adnominal genitive is the genitive denoting the place or time within the limits of which an action takes place. These idioms evidently belong together, and are to be compared with Homeric *ἑσπέριοι ἀφίκοντο, εὗδον παννύχιοι, παλίνορσος ἀπέστη, ἄψορροι ἀπονέοντο*, etc. The type is marked by Delbrück[1] as proethnic, and it throws light on the idioms discussed immediately above. The Sophoklean examples are: *νυκτός*, Ai. 21, **141**, 285, El. 780, Phil. 606; *χρόνου*, O. K. 397, 821, El. **477**, 817, Tr. 173; *ἡμέρας*, El. 698; *θέρους*, Phil. 1340; *χειμῶνος*, Ai. 1143; *πεδίων*, O. K. **689**; *τοῦ προσωτάτω*, Ai. 731; *ἑρκέων*, Ai. 1274; *πυρᾶς*, El. 901. Among these seventeen examples, then, appear five expressions of time and four of place, although *νυκτός* and *χρόνου* are most frequent. In El. 901 *πυρᾶς* illustrates very clearly the predicative origin of the construction. No account has been taken of the common adverbs in *-ου*, which undoubtedly belong in the same category, case-forms petrified into adverbs.

[1] Syntakt. Forschungen, iv. p. 45.

The genitive absolute has advanced a step farther along the line of these predicate genitives; or rather, in most instances of the genitive absolute this farther step has been taken. For we may distinguish three stages: First, the genitive is so closely and directly connected with a noun that one might hesitate whether to call it adnominal or to call it absolute. For example, *οὐ δῆτα ποικίλως αὐδωμένου | δέχου τὰ συμφέροντα τῶν ἀεὶ λόγων*, Phil. 130 f. Secondly, it has the aspect of a predicate genitive similar to those of time and

TRUE GENITIVE.

		Ai.	O.T.	O.K.	Ant.	El.	Tr.	Phil.	Total.	Total.
With substantives and pronouns,	Dial.	158	220	280	167	211	203	186	1,425	1,895
	Lyr.	69	49	67	103	55	60	67	470	
With superlative adjectives,	Dial.	10	9	9	4	12	6	12	62	75
	Lyr.	1	2	3	4	1	2	0	13	
With superlative adverbs,	Dial.	2	2	1	0	2	1	0	8	8
	Lyr.	0	0	0	0	0	0	0	0	
With adverbs of time, etc.,	Dial.	4	5	1	1	9	6	2	28	34
	Lyr.	0	1	1	0	0	1	3	6	
In predicate,	Dial.	1	9	8	8	11	8	8	53	60
	Lyr.	0	0	3	0	0	0	4	7	
Predicate Genitive translated 'about' or 'because of,'	Dial.	3	1	4	1	4	3	2	18	20
	Lyr.	0	0	1	0	1	0	0	2	
Genitive of place and time,	Dial.	5	0	2	0	4	1	2	14	17
	Lyr.	1	0	1	0	1	0	0	3	
Genitive Absolute,	Dial.	11	16	11	6	10	14	6	74	84
	Lyr.	3	1	0	2	2	1	1	10	
Total,	Dial.	194	262	316	187	263	242	218	1,682	2,193
	Lyr.	74	53	76	109	60	64	75	511	
Total,		268	315	392	296	323	306	293	2,193	

23.3+ per cent are lyric.

place, as in El. 101 f., *οὐδεὶς τούτων οἶκτος φέρεται | σοῦ, πάτερ, οὕτως | . . . θανόντος.* Thirdly, this predicate genitive appears to modify the action as a whole, or the verb itself, giving vaguely a cause, condition, etc. of the main action. This last stage is that of most genitives absolute, and may be compared with Tr. 339, *τοῦ με τήνδ' ἐφίστασαι βάσιν;* The usage of Sophokles presents little that is peculiar or especially noteworthy. A few examples occur of a participle standing alone in the absolute construction; as, *τελουμένων,* El. 1344; *κατθανόντος,* Ant. 909.

The synopsis on the preceding page indicates the numbers and distribution of the classes of genitives thus far discussed.

III.

The Homeric uses of the ablatival genitive are nearly all retained by Sophokles, and still others are added. How far his peculiarities in this respect are due to his own invention, extending deliberately the range of certain types, and how far to fastidious choice of phrases from predecessors, cannot now be determined. Nor can we decide, without the statistics for other writers and periods, just how the usage of Sophokles compares with that of his contemporaries and predecessors. But certain it is that we find the ablatival genitive surprisingly well defined and numerously illustrated in his surviving plays. This genitive occurs mostly with verbs, to a considerable extent with verbs compounded with prepositions; but the preposition is seldom the essential governing element. The most convenient classification of the examples for our purpose will be, first, the genitive of separation; second, of source; third, of agent; fourth, of cause; fifth, of comparison; sixth, with compounds of *πρό.* As grammatical categories go, these are tolerably distinct, although connected as closely as the various meanings of the English *from.* Taking them up in order, the genitive of separation (including under that term departure, deprivation, failure, and the like) occurs with the following words and in the places noted. A few variations from the strict alphabetical order,

with compounds under their simple verbs when these latter occur, have been allowed for etymological reasons.

ἄγω, Phil. 613, 630; *ἀείρω*, Ant. 417; *ἀλύσκω*, Ant. 489, El. 626; *ἁμαρτάνω*, El. 1320, Phil. 231 (two; here the meaning is, virtually, 'to fail to receive from'); *ἀμπλακεῖν*, Ant. 554, 910, 1234; *ἀμύνω*, O. T. **894**; *ἀνακουφίζω*, O. T. 24; *ἀναπνέω*, Ai. 274 (cf. *ἐκπνέω*, and also Frag. 147 Dind., *οὐ μύρου πνέον*); *ἀνατίθημι*, Ai. 476 (articular inf.); *ἀνίημι* (cf. *ἀφίημι*, *μεθίημι*, *παρίημι*), O. T. 264, 265; *ἀπαΐσσω*, Ai. 448; *ἀπαλλάσσω* (cf. *ἐναλλάσσω*, *καταλλάσσω*), O. K. 786, Ant. 400, 769, El. 783, 1335, 1336; *ἀπαράσσω*, Tr. **1016**; *ἀπατάω*, Ai. 807; *ἀπαυδάω*, O. T. 236; *ἄπειμι* (*εἰμί*), Ant. 1170, Tr. 165; *ἄπειμι* (*εἶμι*, cf. also *ἔξειμι*, *βαίνω*, *μολεῖν*, etc.), O. T. 229, 431 (where *ἀποστραφείς* is added); *ἀπορέω*, Phil. 898; *ἀποσκεδάννυμι*, O. T. 138; *ἀποβλάπτω*, Ai. 941; *ἀποσπάω*, Ai. 1025, 1176, O. T. 1432, O. K. 895, El. 809; *ἀποστάζω*, Ant. **959** (cf. Frag. 342 Dind., *κεραυνίου | νώτου καταστάζοντα φάρος*, 'letting slip down, droop, from'); *ἀποστατέω*, O. T. 743, Ant. 993; *ἀποστέλλω*, El. 71; *ἀποσυλάω*, see *ἐξωθέω*; *ἀπωθέω* (cf. *ἐξωθέω*), Ai. 446, O. T. 233, 234, 641, 670, El. 1325; *ἀφίημι* (cf. *ἀνίημι*, etc.), O. T. 1521, Ant. 1085 (the last passage is variously construed, some editors, with the Scholiast, explaining *καρδίας* as = *κατὰ καρδίας*, others putting *καρδίας* with *τοξεύματα*; Nauck makes it ablatival); *ἐξαφίημι*, Tr. 72; *ἀφορμάομαι*, O. K. 1401; *ἀτιμάζω*, O. K. 50, Ant. 21 (cf. *ἄτιμος*, O. T. 789).

βαίνω (cf. *μολεῖν* and *ἔρχομαι*), O. T. **152**, O. K. **226** (with *ἔξω πόρσω* added); *ἀποβαίνω*, O. K. **167**; *ἐκβαίνω*, Ai. **892**; *ἐπιβαίνω*, Phil. **194**; *βάλλω*, O. T. 622 (with *ἔξω* added). In regard to this and similar examples, where *ἔξω* is added, it is not easy to say whether the genitive is "governed" by the verb or by *ἔξω*. In their origin, of course, the prototypes of such phrases contained an ablative modifying the verb; the question now is, with which the poet, in thought, would have connected the genitive. From the freedom with which Sophokles uses the ablatival genitive with simple verbs of motion, it appears on the whole more probable that *ἔξω* was secondary in his mind. *ἐκβάλλω*, Ai. 808, O. K. 1307, El. 648.

δεῖ, O. T. 394, 406, Ant. 1098, El. 612, 1494, Phil. 647, 1049, 1060; *δεῖται*, O. T. 1148, 1292 (two), O. K. 1170 (two); *δέχομαι*, O. T. 1163, 1164.

ἐκβιάζω, Phil. **1129**; *ἔκκειμαι*, Ant. 1011; *ἐκκυλίνδω*, O. T. 812; *ἐκπλέω*, Phil. 1375; *ἐκπνέω* (cf. *ἀναπνέω*), Ai. 1148; *ἐκραίνω* (?), Tr. 781; *ἐκρίπτω*, O. T. 1410 (?) (with *ἔξω* added, cf. what is said under *βάλλω*, above), El. **510**; *ἔκτοπος* (cf. compounds of *alpha privative*), O. K. **232**; *ἐκτρέπομαι*, O. T. 851; *ἐξαιτέω*, Tr. 10; *ἔξειμι* (*εἶμι*, cf. *ἄπειμι*), O. K. 909; *ἐξοδοιπορέω*, El. 20; *ἐξωθέω* (cf. *ἀπωθέω*), O. K. 428, 1296, 1330 (*κἀπεσύλησεν* is added); *εἴργω*, O. K. **836**, Ant. 48; *ἀπείργω*, Ai. 51; *ἐλαύνω*, O. T. 97; *ἀπελαύνω*, O. K. 599; *ἐξελαύνω*, O. K. 356, 376, 823; *ἑλεῖν* (cf. *λαμβάνω*), O. T. 1522; *ἀνελεῖν*, O. T. 1035, El. 1139; *ἐξελεῖν*, O. K. **541**; *ἐναλλάσσω* (cf. *ἀπαλλάσσω* and *καταλλάσσω*), Ai. **208**; *ἔρημος*, O. T. 57, 1509, O. K. **1719**, El. 1405; *ἐρύκω*, Tr. **131**; *ἐρυστός*, Ai. 730; (*ἔρχομαι*, Frag. 675 Dind., *μικροῦ δ' ἀγῶνος οὐ μέγ' ἔρχεται κλέος*; cf. O. K. 572, *γῆς ὁποίας ἦλθον*, which is not counted because of the proximity of *ἀπό* in the previous line, although perhaps it should have been;) *ἀπέρχομαι*, O. K. 1165; *ἐξέρχομαι*, O. K. 45, El. 777; *ἔχω*, El. 375 (O. K. 1618, an example which, like that in O. K. 572, is not counted, because of *ἐξ* in the previous line); *ἀνέχω*, O. T. 174.

ἵστημι, O. T. 142; *ἀφίστημι*, El. 776 (two), 912, Phil. 865; *ἐξανίστημι*, Ant. 297; *ἐξίστημι*, Ant. 1105; *μεθίστημι*, Phil. 463.

καταλλάσσω (cf. *ἀπαλλάσσω* and *ἐναλλάσσω*), Ai. 744; *κενός*, O. K. 931, Ant. 756, El. 403; *κηκίω*, Phil. **696** (cf. **784** f. *ἐκ βυθοῦ | κηκῖον*); *κομίζω*, O. T. 580, O. K. 1412; *κρεμαστὸς* (*αὐχένος*), Ant. 1221; *κτάομαι*, Phil. 1371; *κυρέω*, O. K. 1290 (two; *ἀπό*, line 1289, would be still in the listener's mind); *κύρω*, O. K. **1082** (?).

λαμβάνω, O. T. 1004, 1012, **1349**; *λείπω*, Ai. 543, Ant. 548, El. **474**, Tr. 266, 936; *ἀπολείπω*, El. 1169; *λοιπός*, El. 1127; *λήγω*, (Ai. 274, counted under *ἀναπνέω*,) O. K. 346, **1722**, El. **104** (two), 353, 379, Tr. 911, Phil. 1395; *λύω*, Tr. 181; *ἐκλύω*, O. T. 1002; *λωφάω*, Ai. 61.

μαλάσσω, Phil. 1334; *μεθίημι* (cf. *ἀνίημι*, etc.), Ai. **372**,

O. K. 838; *μεταγιγνώσκω*, Ai. **717** (two); *μολεῖν*, El. 908; *μόνος*, Ai. 511, *μοῦνος*, O. K. 1250.

νοσφίζω, Phil. 1427; *ἀπονοσφίζω*, Phil. 979.

ὁρίζω, Phil. 636; *ὀρφανός*, Ant. 425; *ὀρφανίζω*, Tr. 942.

παρίημι (cf. *ἀνίημι*, etc.), O. K. **1212**; *παύω*, Ai. 788, El. 798, Phil. 1379, 1424; *ἀναπαύω*, O. K. 1114; *ἀποπαύω*, Ai. **1205**; *πέμπω*, O. T. 1518 (*ἄποικον* perhaps has some influence); *ἐκπέμπω*, O. T. 309, 951, El. 1130 (?); *πίπτω*, Phil. 1002 (Schol. *ἄνωθεν πεσὼν ἀπὸ πέτρας*; Wecklein-Wunder also connect *πέτρας* directly with *πεσών*); *ἐκπίπτω*, Ai. 1177, O. K. 766, El. 750; *περάω*, O. T. 674. (*πνέω*, Frag. 147 Dind., *οὐ μύρου πνέον*.)

ῥιζόω, O. K. 1591 (with *γῆθεν*).

(*σπένδω*, Frag. 49 Dind., *ἔσπεισα βαιᾶς κύλικος*); *στείχω*, Ant. 10. After observing the use of the ablatival genitive with *μολεῖν*, *ἔρχομαι*, *ἐλθεῖν*, *βαίνω*, there seems no just ground for objecting to the same syntax with *στείχω*. *στερέω*, Ai. 511, O. K. 857, 1443, Ant. 13, 574, 890, El. 1210, Tr. 177; *ἀποστερέω*, O. T. 1379, El. 813, 814; *ἀποστερίσκω*, O. K. 375; *σφάλλω*, Tr. 1113; *σῴζω*, Ant. 1162, Phil. 919; *ἀνασῴζω*, El. 1133; *ἀποσῴζω*, Phil. 1379.

τήκομαι, Ant. 1008; *τητάομαι*, O. K. 1200, 1618, El. 1326, Phil. 228, 383; *τυγχάνω*, O. K. 1168, Phil. 1315.

(*ὑφαιρέω*, Frag. 34 Dind., *ὑφῃρέθη σοῦ κάλαμος ὡσπερεὶ λύρας*.)

φέρω, El. 324; *φεύγω*, O. K. 1024, Phil. 1044; *φυλάσσω*, O. K. **161**.

ψεύδω, Ai. 1382, Tr. 713.

Here belong also a number of genitives with adjectives having *alpha privative* as their first and most important element. In these cases the compound is a more picturesque or more suggestive substitute for an adjective of want, and is construed accordingly. As the second element is more or less prominent the construction shades off into the ablatival genitive of agent, or into the "objective" genitive with adjectives containing more or less of verbal force. Of the following, which are here classed under this head of separation, a few might perhaps be put under the genitive of agent. It is not

important to fix the exact dividing line between two classes which shade into each other so naturally. In none of this list does it seem necessary to consider the genitive "objective."

ἄγευστος κακῶν, Ant. **582**; *ἀκραιφνεῖς τῶν κατηπειλημένων*, O. K. 1147; *ἀλαμπὲς ἡλίου*, Tr. 691; *ἄλυπος ἄτης*, El. 1002, *γήρως*, O. K. 1519; *ἄμμορος πάντων*, Phil. **182**; *ἄμοιρος ταφῆς*, Ai. 1326, *τῶν θεῶν*, Ant. 1070; *ἄνατος κακῶν*, O. K. 786; *ἀνήλιον | ἀνήμεμόν τε | χειμώνων*, O. K. **678**; *ἀπάτωρ ἐμοῦ*, O. K. 1383 (cf. *ἄπαις ἔρσενος γόνου*, Hdt., etc.); *ἄπειρος κακῶν*, Ant. 1191, *γνώμης*, Ant. 1250, *τῶνδε*, Tr. 309; (in O. T. **1094** f. the infinitives *αὔξειν* and *χορεύεσθαι* depend on *ἄπειρος* in **1088**, but are not counted here, because without the article;) *ἄποπτος ἄστεως*, O. T. 762, *ἡμῶν*, El. 1489; *ἄπυρον ἀκτῖνός τ' ἀεὶ | θερμῆς ἄθικτον*, Tr. 685; *γόων οὐκ ἀσήμονες φθόγγοι*, O. K. 1668; *ἄσκευον ἀσπίδων τε καὶ στρατοῦ*, El. 36; *ἄτιμος τοῦ τεθνηκότος*, El. 1214, *οὐδενός*, El. 1215, *ὧν μὲν ἱκόμην | ἄτιμον*, O. T. 788; *ἄχαλκος ἀσπίδων*, O. T. **190**; *ἀψόφητος κωκυμάτων*, Ai. 321.

We must add to these the following examples, wherein one cannot say to which of two words the genitive belongs; it rather belongs to both, or to the phrase as a whole. *κυνῆς ἅλμα κουφιεῖν*, Ai. 1287; *ἀπωστὸς γῆς ἀπορριφθήσομαι*, Ai. 1019; *ἄφορμος ἐμᾶς χθονὸς ἔκθορε*, O. K. **233**; *δράμημα νωτίσαι πάτρας | ἄπουρον*, O. T. **192**; *ἔλαμψε γὰρ τοῦ νιφόεντος ἀρτίως φανεῖσα | φάμα Παρνασοῦ*, O. T. **475**; *ὅπως | σοῦ πρὸς δόμους ἐλθόντος εὖ πράξαιμί τι*, O. T. 1006. This is said by the *ἄγγελος* with evident reference to the words of Oedipus two lines above, *χάριν λάβοις ἐμοῦ*; hence *σοῦ* is to be taken as ablatival, with the idea of receiving a present in the euphemism *εὖ πράξαιμί τι*. So Wecklein-Wunder also, as appears from the comment, "Bene Ed. Oxon. 'ut a te beneficii aliquid consequerer.'" For a somewhat similar turn of words see Tr. 191, *πρὸς σοῦ τι κερδάναιμι*.

Several interesting facts are brought out by these lists of examples. In general, the freedom with which this genitive of separation is used with all sorts of words and expressions denoting removal, issue, deprivation, distinction, separation, receiving, is surprising. No one word occurs many times with

it; the number is not swelled by a few frequent phrases. Apparently Sophokles felt free to indicate these relations by the genitive with almost any word; so that, although many compounds of *ἀπό* and *ἐξ* appear in the lists, especially with verbs of motion, yet enough simple verbs of motion are so construed to show that the poet scarcely felt it necessary to help out such phrases with *ἀπό* or *ἐξ*, or any other preposition. Metre or euphony often seems to determine whether simple or compound shall be used. See e. g. under *λείπω*. Accordingly, where the only objection to a MS. reading is the presence of an ablatival genitive of separation, that reading should without hesitation be retained. Passages to be considered with this principle in view are *ἕλῃ μου*, O. T. 1522, and *ἀνδρῶν μοῦνος*, O. K. 1250, where the genitive offers no difficulty.

Obviously some of the examples enumerated above — namely, those with verbs of receiving — might with some propriety be classed under the head of source; but without strongly objecting to such disposal of them, it seems better for our purpose to reserve the term "genitive of source" to include the genitive with two classes of verbs: first, those of hearing and learning; secondly, verbs denoting birth. These verbs, with references, are the following: —

(*a.*) *ἀκούω*, O. T. 42, 547, 729, 841, O. K. 33, 452, 551, 1171, 1352, El. 926, 927, Tr. 431; *εἰσακούω*, Ai. 318, Tr. 424.

κλύω, Ai. 1072, O. T. 235, 305, O. K. 412, 413, 792, 1117, 1350, **1766** (possibly adnominal; here classed as ablatival, first, because so far from *ταῦτα*, secondly, because with these verbs the genitive usually denotes source when referring to persons, if the accusative of the thing accompanies it), El. 293, 424, 877, Tr. 189, Phil. 1273.

μανθάνω, Ai. 800, 801, O. T. 546, 574, 575, O. K. 593, Ant. 723, 725, 1032, El. 565, 889, Tr. 187, 408; *ἐκμανθάνω*, O. T. 1438 (not governed by *ἐκ*, cf. 1443), O. K. 114.

εἰδέναι, El. 668. Possibly this genitive goes with *χρῄζω*; but, first, the order indicates otherwise; secondly, compare O. K. 1149, *ἃ γ' εἴσει καὐτὸς ἐκ ταύταιν*; finally, when this verb means 'to learn,' as here and in El. 40, and else-

where not infrequently, why should it not be construed like *μανθάνω*?

πυνθάνομαι, O. T. 333, Tr. 387.

(*b.*) *γίγνομαι*, O. T. 1168, El. 775, Phil. **181**, 1284.

φύω, O. T. 1015, 1082, O. K. 1378, Ant. 38, **144**, **145**, **866**, El. 1171 (also Frag. 470 Dind., *θνητῆς φύς*); *ἐκφύω*, Ai. 487, 488, 1295, O. T. 1499.

φυτεύω, O. K. 1324.

βλαστάνω, Tr. 403 (also Frag. 518 Dind.); *ἀποβλαστάνω*, O. K. **534**.

O. T. 1063 may be added, *οὐδ' ἐὰν τρίτης ἐγὼ | μητρὸς φανῶ τρίδουλος*, where the case seems to hover between the adnominal and ablatival genitive, with the idea of source the more prominent.

Under this head belong also a few examples in which the genitive of source, without a preposition, is employed to denote the agent. The following appear in Sophokles: *ἄφαρκτος φίλων*, Ai. **910**; *τῶν φίλων νικώμενος*, Ai. 1353; *ἄθικτος ἡγητῆρος*, O. K. 1521; *κακῶν | δυσάλωτος*, O. K. **1722**; *φίλων ἄκλαυτος*, Ant. **848**; *μαντικῆς ἄπρακτος*, Ant. 1034; *κείνης διδακτά*, El. 344; *ἐκδιδαχθεὶς τῶν κατ' οἶκον* [Tr. 934]; *κρατίστου πατρὸς τραφείς*, Phil. 3 (cf. *οἷος ἐξ οἵου ἐτράφης*, Ai. 557; also *τραφεὶς μητρὸς εὐγενοῦς ἄπο*, Ai. 1229, and *μητέρων τεθραμμένοι*, Aesch. Sept. 792); *ἐλπίδων | ἄπιστον*, Phil. 867; *φωνῆς | προσφθεγκτός*, Phil. 1066.

As already remarked, some few of those placed under the genitive of separation with compounds of *alpha privative* may perhaps belong here instead. Thus Wunder, for example, agrees with Brunck in so disposing of *γήρως*, O. K. 1519.

The genitive is used to denote cause in exclamations in the following passages: with *οἴμοι*, Ai. **367**, **900**, **908**, 980, O. K. **202**, 982, 1399 (two), 1400, Ant. 82, **1265**, El. 1143 (with *τάλαινα*), 1179, 1209 (with *τάλαινα*), Tr. **971**, **972**; with *ἐή*, O. K. **149**; with *φεῦ*, El. 920, 1183.

With other words the genitive of cause is difficult to separate from genitives wholly doubtful in character. The following, however, seem to belong here: (*βαρυνθήσεσθε*, Frag. 627 Dind.); *ἐντρέπομαι*, Ai. 90, O. T. 724, 1226, El. 520; *κήδο-*

μαι, Ai. **204**, O. T. 1060, El. **1059**, 1327; *προκήδομαι*, Ant. 741, Tr. **965**; *ὀνίναμαι*, Tr. 570; *ἀπονίναμαι*, El. **211**; *αὔξω*, O. K. **1565**; *δείλαιος*, O. T. 1347 (two); *ἐπιμέμφομαι*, Tr. **112**; *εὐδαιμονίζω*, O. K. **144** (?); *ζηλῶ*, El. 1027; *ἥδομαι*, Phil. **715**. In this passage the genitive of cause appears instead of the more usual instrumental dative, which is seen, e. g., in O. T. 454. *κλαίω*, El. 1117; *σωτῆρα κλῄζει*, O. T. 48; *μηνίζω*, Ant. 1177 (?); *πορεύω*, Tr. 560; *στρέφομαι*, Ai. 1116; *στυγῶ*, El. 1027. In O. T. 1478 the genitive *τῆσδε τῆς ὁδοῦ* gives the cause of the entire wish expressed in the next line. In O. K. 1506, on the other hand, *τῆσδε τῆς ὁδοῦ* is decidedly better construed with *τύχην*, as Nauck explains.

Better in this connection than elsewhere may be enumerated the occurrences of the genitive with compounds of *πρό*, in which the preposition really determines the case. These genitives are ablatival in origin, and somewhat like those of cause. The verbs, with references, are the following: *προέχω*, Ant. 208, O. T. 1115, Phil. **138**; *προΐστημι*, Ai. 803, El. 980; *προκάμνω*, Ai. 1269; *πρόκειμαι*, Tr. 925; *προκηραίνω*, Tr. 29; *προσκοπέω*, Ant. 688; *προταρβέω*, Ant. 83; *προτίθημι*, O. K. 419.

Lastly, the genitive of comparison with adjectives in the comparative degree is so common in prose, and in Sophokles presents so little that is peculiar, that few words need be added to the statistics of the table. In El. **155**, however, *περισσά* takes the genitive like a comparative, as does also *ἀλλοκότῳ* in Phil. **1191** f.; in Ant. 678, *ἡσσητέα*, as in prose, is construed like its primitive, *ἥσσων*. So *ἡσσῶνται τέκνων*, Frag. 674 *a* Dind. In Ai. 1357 the genitive is used because of the comparative idea in the phrase *νικᾷ πολύ*, and there seems to be no ground for suspecting the text. With this should be compared Phil. **1100**, *τοῦ λῴονος δαίμονος εἵλου τὸ κάκιον αἰνεῖν*, where *τοῦ λῴονος* depends on the comparative idea in *εἵλου*. Here also are to be counted the two genitives with superlatives mentioned above: *τὸ κάλ-|λιστον . . . | τῶν προτέρων φάος*, Ant. **100** ff.; *λῷστε τῶν πρὶν ἐντόπων*, Phil. **1171**.

The following table gives a summary.

ABLATIVAL GENITIVE.

		Al.	O. T.	O. K.	Ant.	El.	Tr.	Phil.	Total.	Total.
Genitive of Separation,	Dial.	24	44	39	29	40	14	26	216	252
	Lyr.	6	6	12	2	4	2	4	36	
Genitive of Source,	Dial.	7	16	14	4	10	7	2	60	66
	Lyr.	0	0	2	3	0	0	1	6	
Genitive of Agent,	Dial.	1	0	1	1	1	[1]	3	8	11
	Lyr.	1	0	1	1	0	0	0	3	
Genitive of Cause,	Dial.	3	7	4	3	10	1	0	28	44
	Lyr.	4	0	4	1	2	4	1	16	
With compounds of πρό,	Dial	2	1	1	3	1	2	0	10	11
	Lyr.	0	0	0	0	0	0	1	1	
Genitive of Comparison,	Dial.	7	12	5	14	10	2	6	56	72
	Lyr.	[1]	4	1	2	3	0	5	16	
Total,	Dial.	44	80	64	54	72	27	37	378	456
	Lyr.	12	10	20	9	9	6	12	78	
Total,		56	90	84	63	81	33	49	456	
17.1+ per cent Lyric.										

IV.

No attempt is here made to trace or discuss the true nature of the genitives brought forward in this chapter. Many of them are pretty certainly adnominal in origin, most of the remainder are probably so. But the history of most of them is obscure, extending back to pre-Homeric, and in some cases to pro-ethnic times. The endeavor to trace their development would therefore lead far, and would probably produce results of little positive value. Without a wide acquaintance with early Indo-European speech, such an endeavor would be well-nigh wasted. And finally, notwithstanding the space required to describe them in the grammars, the actual number of these genitives is comparatively small, — less than that of genitives

adnominal, ablatival, or with prepositions. The purpose of this paper is primarily to present a clear view of the Sophoklean usage; to this end the classification of the revised Hadley's Grammar will be followed, with some modifications made necessary by the classification adopted in the other chapters of this essay.

A. The genitive is used as object with the following classes of verbs: —

a. Verbs of sharing, under the general head of verbs whose action affects the object only in part (Hadley, 736, 737).

κοινόω, Tr. 546; *μέτεστι*, O. T. 630, O. K. 568, Ant. 1072; *μετέχω*, O. T. 1465, Ant. 534, El. 1168, Phil. 248; *ἔχω*, O. T. 709 (where *ἔχον* is about equivalent to *μέτεχον*, as Wunder points out, yet Ellendt approves Hermann's interpretation, "ex vatum arte pendere," making it ablatival); *συλλαμβάνω*, Phil. 281; *ξυμμετίσχω*, Ant. 537. (*δοῦσα* with partitive genitive occurs in Frag. 531 Dind.)

b. Verbs of touching, taking hold of, beginning (H. 738).

ἅπτομαι, O. K. 830 (two), 955 (?), 1550, Ant. 179, Tr. **1010**; *ἀνθάπτομαι*, Tr. 778; *ἐφάπτομαι*, Ai. 1172, O. K. 859; *ἄρχω*, Ai. **935**, Tr. 871 (cf. verbs of ruling); *κατάρχω*, O. K. 1019, Tr. 1135; *δράσσομαι*, Ant. 235; *ἐμβαίνω*, O. K. 400; *ἐπεμβαίνω*, O. K. 924; *ἐμβατεύω*, O. T. 825; *ἐπιβαίνω*, O. K. **189**, Phil. **1463**. If it is hard to separate this from compounds of *ἐπί*, it seems even harder to separate it from the three preceding words. *ἔχομαι*, O. T. **891** (?), O. K. 424 (cf. Frag. 325 Dind., *τοῦ κερδαίνειν* | *ἔχονται*, where Ellendt translates *ἔχονται* by *inhaerere;* also Frag. 26 Dind., *τοῦ δὲ κερδαίνειν ἔχου*); *θιγγάνω*, Ai. **1409**, O. T. 760, 1413, O. K. 328, 1133, Tr. 715, Phil. 407, 408, 762, 1398; *προσθιγγάνω*, O. K. **173**, Phil. 8 (two); *λαμβάνομαι*, O. K. 373 (two); *μάρπτω*, Tr. 779; *πελάζω*, Ai. **710**, **889**, O. T. **1100**, Phil. 1327; *ἐμπελάζω*, Tr. 17; *ψαύω*, O. T. 1464, O. K. 863, 1639, Ant. 857 (?), Tr. 904, **1007**; *ἐπιψαύω*, Ai. 1394, Phil. 669, 1255.

c. Verbs of aiming, reaching, attaining (H. 739).

ἀντάω, O. K. 1445; *ἀντιάω*, El. **869**, **870**; *ἵημι*, Ai. **154**, Tr. **514** (*ἱέμενοι*); *ἀφίημι*, Ant. 1084; *ἐφίεμαι*, El. **143**; *κιχάνω*,

O. K. 1487; *κυρέω*, O. T. 1513, Ant. **870**, El. **849**; *κύρω*, O. K. **247**, **1082**; [*λαγχάνω*, O. K. 450; see *τυγχάνω*;] *πειράομαι*, El. 468; *τοξεύω*, Ant. 1033, 1034; *τυγχάνω*, Ai. 527, 924, 967, O. T. 423, 677, 1435, 1449, 1450, O. K. 450 (MSS. give *λάχωσι*), 482, 780, **1482**, Ant. 465, 669, 699, El. 31, 364, 583, 963, 971, 992, 1469, 1488, Tr. 728, 1116, Phil. 618, **1091**, 1315; *προστυγχάνω*, El. 1463 (two), Phil. 552; *συντυγχάνω*, Phil. 321 (three).

d. Verbs of ruling and leading (H. 741).

ἀνάσσειν, Ai. 1100, 1101, 1102, O. T. **1104**; *ἄρχω*, Ai. **935**, 1068, 1107, O. T. 54, 579, O. K. 66, Ant. 525, 736, Tr. 443 (444 spurious), Phil. **860** (three); [*δεσπόζειν*, Tr. 363;] *ἡγοῦμαι*, Ai. 1106, El. 1038 (? *νῷν*); *κραίνω*, Ai. 1050, O. K. 296, 862, 926; *κρατέω*, Ai. 484, 1067, 1099, 1102, 1337, O. T. 55, 409, **1197**, O. K. 400, 405, 408, 646, 1207, 1385, Ant. **350**, El. 1175, Phil. 922, 989, 1048, 1292; *κρατύνω*, O. T. 14, Phil. 365, 1059, **1161**; *πρεσβεύων*, Ai. 1389; *στρατηγέω*, Ai. 1100; *τυραννεύω*, O. K. 449.

e. Verbs denoting an action of the senses or mind, — hear, taste, smell, remember, forget, care for, neglect, spare, desire (H. 742). Under this head, —

(1.) The following verbs of hearing.

αἰσθάνομαι, El. 78, 683; *ἐπαισθάνομαι*, O. K. 1351, Ant. 1183, Phil. 1295; *ἀΐω*, O. K. 304 (?), Phil. **1410**; *ἀκούω*, Ai. 335, 1070, O. T. 952, O. K. 418, 1187, El. 793, Phil. 225, 596; *ἀπακούω*, El. 81; *εἰσακούω*, Ai. 789, O. K. 1645, Tr. 351; *ἐπακούω*, O. T. 708, Phil. **1417**; *κλύω*, Ai. 291, 1162, 1352, O. T. 1472, O. K. 493, 740, 1173, 1176, 1406, 1642, Ant. 1206, El. 675, 1376, 1377, Tr. 414, 864, 1115, 1244, Phil. 632, **688**, 925, 976, 977.

Of these verbs, *ἀκούω*, *εἰσακούω*, and *κλύω*, as mentioned above, take also the genitive of source; and *ἀκούω* and *κλύω* appear with the genitive translated 'about,' classed as a development of the predicate adnominal. Furthermore, they are all construed, in Sophokles or elsewhere, with the accusative in precisely the same sense.

(2.) Two verbs of tasting.

γεύομαι, Ant. 1005, Tr. 1101; *πατέομαι*, Ant. 201.

(3.) Verbs of remembering and forgetting.

μιμνήσκω, O. T. 49, 564, 1401, O. K. 1361, 1555, El. 1252, Tr. 1223; *ἐπιμιμνήσκω*, Phil. 1407; *παραμιμνήσκω*, Tr. 1125; *λανθάνομαι*, El. **146**, **167**, **168**, 342, **1287**; *ἐκλανθάνομαι*, O. K. 1005.

(4.) Verbs of caring for, neglecting, and sparing.

μέλω, Ai. 689, 990, 1184, O. T. 1462, 1466, O. K. 1137, Ant. 1335, El. 342, Phil. 1036; *ἀκηδέω*, or, according to MSS., *ἀφειδέω*, Ant. 414; *ἀφειδέω*, El. 980; *φείδω*, Ai. 844, El. 716, Phil. 749.

(5.) Verbs of desiring.

ἐπαιτέω (*ὧν ἐπαιτεῖς*, 'what thou askest'), O. T. 1424; *ἐρῶ*, Ai. 686, Ant. 90, 1336, Tr. 551 (?); *κεχρημένοι*, Phil. 1264; *μαιμάω*, Ai. 50; *προσπίτνω*, O. K. **1755**; *χρῄζω*, Ai. 473, O. T. 597, 932, O. K. **1211**; *προσχρῄζω*, Phil. 1055.

f. Verbs of plenty (H. 743).

βρύω, O. K. 17 (three); *γέμω*, O. T. 4, 5 (two), Phil. 876 (two); *κορέννυμι*, Phil. **1157**; *μεστόω*, Ant. 280, El. 713; *πίμπλημι*, O. K. 480, 481 (two), Ant. **121**, El. 730, 906; *ὑπερπίμπλημι*, O. T. **874**; *στάζω*, El. 1423 (? *θυηλαῖς*).

g. With two verbs of exchanging occurs the genitive of price. *μεταβάλλομαι*, El. **1262**; *πρίασθαι*, Ai. 477.

h. *ἐπαιτιάομαι* with the genitive of the charge, Ant. 490.

i. *ἀξιόω*, the use of which with the genitive proceeds, of course, from that of *ἄξιος* with the same case (see *ἄξιος*, below), Phil. 62. *γελάω*, Phil. **1125**; Wunder, on Ai. 745, remarks the frequent use of simple instead of compound verbs, with the cases commonly taken by the compounds; as here, *γελᾷ* for *καταγελᾷ*.

j. Compounds in which the preposition governs the case. (Among these the genitive with compounds of *πρό* is evidently a development from the ablative-genitive with simple *πρό*; these compounds have already been given.)

ἀντέχω, O. K. 1651; *διαΐσσω*, Tr. 1083; *διαρροιζέω*, Tr. 568; *διελθεῖν*, Tr. 717; *διίημι*, O. K. 963; *ἐπιστρέφομαι*, O. T. 728, Phil. 598; *καθικέσθαι*, O. T. 809; *καθυβρίζω*, O. K. 960, 961 (two); *κατάφημι*, O. T. **505**; *κατηγορέω*, O. T. 514, 529; *ὑπεραλγέω*, Ant. **628**; *ὑπερδέδοικα*, Ant. 82; *ὑπερίστημι*, El. **188**;

ὑπερμάχομαι, Ai. 1346, O. T. 258 (two); ὑπερπονέομαι, Ai. 1310; ὑπερφέρω, O. T. 380.

k. In O. K. 436, ἔρωτος τοῦδε ὠφελῶν is too strange to be regarded as certainly what Sophokles wrote; Tr. 170 is probably not genuine; and ὦν in Tr. 548 is very doubtful. None of these are counted.

The following table gives a summary, without showing in detail the distribution of the examples, since the detailed numbers appear to have no special significance.

GENITIVE, NOT ABLATIVAL, WITH VERBS.

	Ai.	O. T.	O. K.	Ant.	El.	Tr.	Phil.	Total.	Total.
In Dialogue	35	40	59	25	30	23	39	251	299
Lyric	5	5	7	5	10	4	12	48	
Total	40	45	66	30	40	27	51	299	
16.1— per cent Lyric.									

B With adjectives — and a few adverbs derived from them — the genitive is used in various relations which are as difficult to classify as those of the adnominal genitive. A few of the adjectives thus accompanied in Sophokles are common elsewhere, and so perfectly familiar. But taking all the examples together, no classification appears to have much significance, either logical or historical; convenience of description and reference is all that is aimed at in setting them forth in the following four groups.

a. αἴτιος, O. K. 1298, El. 295, Tr. 773, Phil. 590, 1426; μεταίτιος, Tr. 261, 448 (two); ἄξιος, O. T. 778, 972, O. K. 905, El. 707; ἀνάξιος, Phil. 1009; κατάξιος, Phil. 1009; ἀξίως, El. 800, 801; καταξίως, O. K. 911 f. (three). (Cf. ἀξιόω.)

b. Adjectives of plenty and fulness. ἀνάριθμος, Ai. 601, O. T. 179, El. 232, Tr. 247; περιστεφής, El. 896; πλέως, Ai. 745, 1112, 1150, O. K. 1162, Ant. 721, El. 607, 1405, Phil. 39, 1074; πλήρης, Ai. 307, O. K. 778, Ant. 1017, 1052, Phil. 1088; πολυστεφής, O. T. 83.

c. Adjectives which have in common the possession of

more or less of verbal force, so that the genitive stands to the adjective as the object, in genitive, dative, or accusative, to a verb. Sometimes it is the first part of a compound, as in *σύμφωνος*, with which the genitive is most closely connected logically; sometimes the first part, as *alpha privative*, *ἐξ*, or *ἀπό*, negatives the phrase. *ἀδαής*, Phil. **827** (two); *ἀκόλουθος*, O. K. **719**; *ἄοκνος*, Ai. 563, Tr. **841**; *ἄπαρνος*, Ant. 435; *ἀρωγός*, Ai. **357**; *ἀταρβής*, Tr. 23; *ἀφόβητος*, O. T. 885; *ἄφωνος*, O. K. 865; *ἄψαυστος*, O. T. 969; *διάδοχος*, Phil. 867; *ἔκτιμος*, El. **241**; *ἐπήβολος*, Ant. 492; *ἐπίσκοπος*, Ai. 976 (?); *ἐπίσκιος*, O. K. 1650; *ἠθάς*, El. 373; *ἴδρις*, El. 608; *λυτήριος*, El. 447, 636; *μετάδρομος*, El. **1387**; *νομάς*, O. K. 687 (?); *ὁμόστολος*, O. T. **212**; *παυστήριος*, O. T. 150; *πρέπον*, Ai. 534; *πρόθυμος*, El. 3; *προμηθής*, El. **1078**; *προσήγορος*, O. T. 1437; *σύμφωνος*, O. T. 420.

d. Miscellaneous. *ἀμοιβός*, Ant. 1067; *ἀντίλυρος*, Tr. **643**; *ἔγκληρος*, O. K. 751, Ant. **813**; *ἐγκρατής*, Phil. 75; *ἐνάντιος*, Ai. 1283; *ἐπίκαιρος*, Ai. **1405**; *ἐπώνυμος*, O. T. **210**, O. K. 65, 1322; *ἰσόμοιρος*, El. **87**; *κύριος*, O. K. 1041; *λαθίπονος* (*ὀδυνᾶν*), Tr. **1021**; *ὕπαρχος*, Ai. 1105 (genitive of comparison?); *ὕπαυλος* (*σκηνῆς*), Ai. 796 (cf. *ὑπόστεγος*); *ὑπερτελής*, Tr. 36; *ὑπόστεγος* (*δωμάτων*), El. **1386** (cf. *ὕπαυλος*); *ὕπουλος* (*κάλλος κακῶν ὕπουλον*), O. T. 1396 (?); *φερέγγυος*, El. 942.

The adjectives *αἴτιος* and *ἄξιος*, with their compounds, chance not to occur in lyric lines. Adjectives of plenty constitute a fairly well-defined class, with which the genitive is frequent in all periods. But this class must certainly be separated from adjectives of want, with which the case is ablatival. In groups *c* and *d*, some of the constructions are bold extensions of ordinary or not rare usage. Such boldness in syntax is most likely to occur in lyric passages, and gives in these groups slightly more than the ordinary proportion of lyric references. The number of adjectives occurring but once with the genitive is noticeable. In these two latter groups also appear some adjectives which may perhaps equally well be taken as substantives. Thus El. **87**, *γῆς ἰσόμοιρ' ἀήρ*, is best understood as equivalent to 'air, earth's equally sharing partner in space,' and so 'coextensive with the earth.' In *λαθίπονος ὀδυνᾶν*, Tr. **1021**, *ὕπαυλος σκηνῆς*, Ai. 796, and *ὑπό-*

στεγος δωμάτων, El. 1386, we find a compound of which the second member is a noun, followed by a genitive repeating the meaning of the noun. These are similar to some of the compounds of *alpha privative,* enumerated under the genitive of separation; yet in those the second element seems less prominent than in these three. The table gives a summary.

GENITIVE, NOT ABLATIVAL, WITH ADJECTIVES.

	Ai.	O. T.	O.K.	Ant.	El	Tr.	Phil.	Total.	Total.
In Dialogue	10	9	14	6	13	7	8	67	87
Lyric	3	3	1	1	6	3	3	20	
Total	13	12	15	7	19	10	11	87	
23.0 per cent Lyric.									

V.

There remain for consideration the genitives which occur with prepositions, proper and improper. Of those adverbs which, from their use with verbs, are strictly entitled to the name of prepositions, ἀπό, ἐξ, παρά, and πρός, when used with the genitive, can be clearly shown to express some *from*-relation. The genitive with them is distinctly ablatival. To these must be added πρό, whose variations in meaning all go back to *forth from* or *forward from.* The genitive with κατά in the phrase κατ' ἄκρας, which occurs thrice, is ablatival. This is the only phrase in Sophokles in which this preposition means *down from.* The character of other genitives with κατά is doubtful. As for ὑπό, there is no instance in Sophokles of its meaning *from under,* in the literal, local sense. When it denotes agency, the genitive is probably, but not demonstrably, ablatival; but it shades off perplexingly into the meanings *because of, under the influence of, accompanied by,* and locally *under.* It seems best, therefore, not to count it as governing the ablative-genitive.

In regard to most of the so-called improper prepositions it is difficult to decide with certainty which are construed with the genitive primarily because of some shade of *from*-relation,

and which are construed with the genitive merely because, when they came into familiar use, the genitive had already become the regular case to put with such adverbs. Nevertheless, it seems best to treat as governing an ablatival genitive *ἄνευ, ἄπωθεν, ἄτερ, ἄτερθε, δίχα, ἐκτός, ἐκποδών, ἔξω, ἔξωθεν, λάθρᾳ, πάρος, πάροιθε, πέρα* (*πέραν*), *πλήν* (originally a comparative), *πρόσθεν, χωρίς*. It is possible that *ἔξω* belongs with *εἴσω*, and should not be placed in the ablatival list; but it seems better to separate them as is here done, for the reason that *ἔξω* often occurs where actual motion *away from* or *out from* is indicated, and all its senses can be easily brought back to these, whereas all indications of an ablative with *εἴσω* are obliterated in Sophokles, if indeed they are to be found anywhere.

The following tables indicate the distribution and the total number of occurrences of the examples: —

ABLATIVAL GENITIVE WITH PREPOSITIONS.

		Al.	O. T.	O. K.	Ant.	El.	Tr.	Phil.	Total.	Total.
ἀπό	Dial.	10	21	19	7	10	11	6	84	114
	Lyr.	5	6	4	0	2	6	7	30	
ἐξ	Dial.	22	47	39	37	47	40	40	272	306
	Lyr.	5	4	5	6	8	1	5	34	
παρά	Dial.	4	10	4	3	5	6	1	33	37
	Lyr.	0	0	1	2	1	0	0	4	
πρό	Dial.	0	2	4	2	0	0	1	9	14
	Lyr.	0	0	0	1	2	2	0	5	
πρός	Dial.	22	32	12	9	21	17	17	130	142
	Lyr.	0	3	3	2	1	0	3	12	
κατ' ἄκρας	Dial.	0	0	0	1	0	1	0	2	3
	Lyr.	0	0	1	0	0	0	0	1	
Total,	Dial.	58	112	78	59	83	75	65	530	616
	Lyr.	10	13	14	11	14	9	15	86	
Total,		68	125	92	70	97	84	80	616	
14.0— per cent Lyric.										

ABLATIVAL GENITIVE WITH ADVERBS.

		Ai.	O. T.	O. K.	Ant.	El.	Tr.	Phil.	Total.	Total.
ἄνευ	Dial.	1	4	9	0	1	1	1	17	19
	Lyr.	0	0	1	0	1	0	0	2	
ἄπωθεν	Dial.	0	0	0	0	0	1	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
ἄτερ	Dial.	2	0	0	1	1	1	3	8	11
	Lyr.	1	0	0	0	1	0	1	3	
ἄτερθε	Dial.	0	0	0	0	0	0	0	0	1
	Lyr.	1	0	0	0	0	0	0	1	
δίχα	Dial.	1	0	2	0	2	1	0	6	9
	Lyr.	0	0	1	0	0	0	2	3	
ἐκτός	Dial.	0	0	0	3	2	1	2	8	10
	Lyr.	0	0	0	2	0	0	0	2	
ἐκποδών	Dial.	0	0	1	0	0	0	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
ἔξω	Dial.	0	2	0	2	0	1	0	5	7
	Lyr.	0	0	1	1	0	0	0	2	
ἔξωθεν	Dial.	0	0	0	0	1	0	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
λάθρᾳ	Dial.	0	2	1	0	1	0	0	4	4
	Lyr.	0	0	0	0	0	0	0	0	
πάρος	Dial.	1	0	0	0	0	1	0	2	2
	Lyr.	0	0	0	0	0	0	0	0	
πάροιθεν	Dial.	0	0	0	0	0	1	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
πέρα(ν)	Dial.	0	1	1	0	2	1	0	5	6
	Lyr.	0	0	0	1	0	0	0	1	
πλήν	Dial.	2	1	1	0	3	0	2	9	10
	Lyr.	1	0	0	0	0	0	0	1	
πρόσθεν	Dial.	0	0	0	1	0	0	1	2	2
	Lyr.	0	0	0	0	0	0	0	0	
χωρίς	Dial.	1	2	0	1	1	0	3	8	11
	Lyr.	2	0	0	0	0	1	0	3	
Total,	Dial.	8	12	15	8	14	8	13	78	96
	Lyr.	4	0	3	5	2	1	3	18	
Total,		12	12	18	13	16	9	16	96	
18.5+ per cent are Lyric.										

With other prepositions or quasi-prepositions the genitive is in its origin either adnominal or doubtful. Here more than

elsewhere the genitive and ablative have really coalesced, in some usages, into a single case.

The following tables exhibit the statistics, first for the true prepositions, secondly for the improper prepositions, used by Sophokles. It will be seen that several of these latter are Sophoklean *ἅπαξ λεγόμενα*; also that *ἀμφί* probably occurs but once with the genitive (Phil. 554). *περί*, except in Ai. 151, always follows its case, and stands at the end of the line. *κατά*, *μετά*, and *ὑπέρ* do not occur in the Trachiniae.

GENITIVE WITH PREPOSITIONS, NOT ABLATIVAL.

		Ai.	O. T.	O.K.	Ant.	El.	Tr.	Phil.	Total.	Total.
ἀμφί	Dial.	0	0	0	0	0	0	1	1	1
	Lyr.	0	0	0	0	0	0	0	0	
ἀντί	Dial.	6	7	12	4	5	6	3	43	43
	Lyr.	0	0	0	0	0	0	0	0	
διά	Dial.	4	6	5	7	3	3	5	33	37
	Lyr.	1	0	0	0	1	1	1	4	
ἐπί	Dial.	2	4	9	2	2	1	3	23	33
	Lyr.	1	1	4	2	1	0	1	10	
κατά	Dial.	5	1	1	1	2	0	2	12	19
	Lyr.	2	0	2	1	2	0	0	7	
μετά	Dial.	1	5	3	3	2	0	6	20	25
	Lyr.	2	0	0	1	0	0	2	5	
περί	Dial.	2	3	1	4	3	2	2	17	19
	Lyr.	2	0	0	0	0	0	0	2	
ὑπέρ	Dial.	3	8	2	3	2	0	2	20	32
	Lyr.	1	2	1	7	0	0	1	12	
ὑπό [*ὑπαί*]	Dial.	9	6	10	10	8	8	6	57	67
	Lyr.	4	0	1	0	1	1	3	10	
Total,	Dial.	32	40	43	34	27	20	30	226	276
	Lyr.	13	3	8	11	5	2	8	50	
Total,		45	43	51	45	32	22	38	276	

18+ per cent are Lyric.

GENITIVE WITH ADVERBS, NOT ABLATIVAL.

		Ai.	O. T.	O. K.	Ant.	El.	Tr.	Phil.	Total.	Total.
ἄγχι (ἄσσον)	Dial.	0	0	2	0	1	0	0	3	3
	Lyr.	0	0	0	0	0	0	0	0	
ἀντίον	Dial.	0	0	0	0	0	1	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
διαμπερές	Dial.	0	0	0	0	0	0	1	1	1
	Lyr.	0	0	0	0	0	0	0	0	
ἐγγυτέρω ἐγγυτάτω	Dial.	0	0	-τέρω	-τάτω	0	0	0	0	2
	Lyr.	0	0	1	1	0	0	0	2	
εἵνεκα	Dial.	5	7	3	3	6	1	2	27	27
	Lyr.	0	0	0	0	0	0	0	0	
ἔνδον	Dial.	0	0	0	0	1	0	0	1	2
	Lyr.	1	0	0	0	0	0	0	1	
ἔνδοθεν	Dial.	1	0	0	0	0	0	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
εἴσω ἔσω	Dial.	1	2	0	0	1	3	1	8	9
	Lyr.	0	1	0	0	0	0	0	1	
ἕκατι	Dial.	0	0	0	0	0	2	1	3	3
	Lyr.	0	0	0	0	0	0	0	0	
ἐναντίον	Dial.	0	0	1	0	0	0	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
ἔνερθεν	Dial.	0	0	0	0	0	0	1	1	1
	Lyr.	0	0	0	0	0	0	0	0	
καθύπερθεν	Dial.	0	0	0	0	0	0	0	0	1
	Lyr.	0	0	0	0	1	0	0	1	
κάτω	Dial.	0	1	0	0	0	0	0	1	2
	Lyr.	0	0	0	0	1	0	0	1	
μεταξύ	Dial.	0	0	1	0	0	0	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
[μέχρις]	Dial.	1	0	0	0	0	0	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
ὄπισθεν	Dial.	0	0	0	1	0	0	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
πέλας	Dial.	0	3	3	1	1	0	0	8	8
	Lyr.	0	0	0	0	0	0	0	0	
πλησίον	Dial.	0	0	0	0	0	1	0	1	1
	Lyr.	0	0	0	0	0	0	0	0	
Total,	Dial.	8	13	10	5	10	8	6	60	66
	Lyr.	1	1	1	1	2	0	0	6	
Total,		9	14	11	6	12	8	6	66	

9.0+ per cent are Lyric.

VI.

Summing up the preceding tables, we obtain these figures: —

	Al.	O. T.	O. K.	Ant.	El.	Tr.	Phil.	Total.
Total in Dialogue,	389	568	599	378	512	410	416	3272
Total in Lyric,	122	88	130	152	108	89	128	817
Total,	511	656	729	530	620	499	544	4089
Per cent in Lyric,	23.9—	13.4+	17.8+	28.7—	17.4+	17.8+	23.5+	20.0—

We find also the following facts: 53.6+ per cent are true genitives, 28.6 per cent are ablatival genitives, while only 17.8— per cent are to be classed as doubtful. And even if the reader insists on making some changes in the assignment to various classes, lessening somewhat the ablatival division, still the figures cannot be changed very greatly. That so large a proportion of ablatival constructions should survive the confusion of forms, is interesting, and even surprising. Certainly the grammars would never lead one to suspect the fact. The 28.6 per cent of ablatival genitives in Sophokles are made up of 2.4— with quasi-prepositions, 15.0+ per cent with true prepositions, and 11.2— per cent with verbs and adjectives, some of which contain a preposition which more or less influences the case. On the other hand, of the 17.8— per cent classed as doubtful, 1.6+ per cent are found with quasi-prepositions; 6.7+ per cent with true prepositions; 2.1+ per cent with adjectives; and 7.3— per cent with verbs. 21.8 per cent, therefore, of the whole number of genitives occur with prepositions proper, and 4.0 per cent with quasi-prepositions.

What other conclusions may be drawn from the statistics given in this paper must remain uncertain until these statistics can be compared with like figures for other writers and other periods. Those figures, so far as is known to the writer, are entirely wanting.

II. — *Greek Ideas as to the Effect of Burial on the Future of the Soul.*

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If the familiar modern authorities on classical antiquities are to be believed, it was an article of old Greek faith that the souls of the unburied dead were shut out from the place of final rest. But although these authorities generally formulate the doctrine without qualification, their formulas exhibit not altogether trivial differences. Some limit themselves to the statement above given. Thus Teuffel writes in Pauly's Real-Encyclopädie s. v. *Inferi*: "Die Seele kann nicht in die Unterwelt, so lange der Leib noch physisch vorhanden, d. h. nicht bestattet ist." Similarly Schömann, in his Griechische Alterthümer, ii. p. 565: "Die Seele des Verstorbenen fand keine Stätte im Reich der Todten, so lange der Leib nicht bestattet war." De Coulanges would seem to go farther, and commit himself to the more definite view that the neglected soul was thought of as remaining on earth among living men. He says (Ancient City, p. 18): "In order that the soul might be confined to this subterranean abode, . . . it was necessary that the body to which it remained attached should be covered with earth. The soul that had no tomb . . . must wander forever under the form of a *larva* or phantom." Finally, a more prevalent form of this general idea is expressed by E. B. Tylor (Primitive Culture, ii. p. 28) in these words: "In classic antiquity . . . it was the most sacred of duties to give the body its funeral rites, that the shade should not flit moaning near the gates of Hades, nor wander in the dismal crowd along the banks of Acheron."

That there is truth in all the foregoing quotations is not denied; but it is the object of the present paper to show that Greek belief on this subject was far less positive and self-consistent than is usually represented. Ideas about the future

life are, in fact, among all peoples, hazy and self-contradictory. Not only do different persons think differently, but, with the rarest exceptions, no one person maintains in his own mind a vivid, detailed, and persistent picture of that life. Casual allusions to it are made with a minimum of realization of their meaning; and even circumstantial statements about it cannot be interpreted like a man's testimony about the town he lives in. Bearing this in mind, we may proceed to consider the occasional appearance in Greek literature of the idea that the souls of the unburied dead were not admitted to Hades.

The subject will be best approached by considering for a moment the genesis of the idea of soul. The earliest conception of a soul is that of an attenuated duplicate of the body, capable of detachment from the body, yet generally resident in it. Probably this conception is generated by cases of apparent detachment, — cases, in other words, of dreams and apparitions; yet, when this dualism is once firmly established, the union of soul and body seems to savage reflection to be in general intimate and persistent. As a rule, the body, so long as present to the eyes and the thoughts, is inhabited by the soul; only now and then does the soul leave its tenement and wander abroad. The association of ideas between body and soul is consequently so powerful that the sight of even a corpse — yes, of even a heap of human bones — calls up the idea of the soul by which the body was tenanted during lifetime. If there are few persons even among the most enlightened races who are entirely emancipated from this association of ideas, among races in the lower stages of culture it is irresistible. But with uncultured man, imagining is believing. When, then, a dead body, instead of being put out of sight and out of mind, remains where human eyes may see it, the notion that the spirit is somehow present too is likely to spring up. Evidence of the wide diffusion of this notion may be seen in Tylor's Primitive Culture, ii. pp. 27 f.; and that its origin is what has just been suggested can hardly be doubted by any one who accepts the general theory of Animism advanced in that work. True, the importance which comes to be attached to the ceremonial accompaniments of burial may

lead men to think and speak as if it were the deprivation of these which keeps the ghost from its proper destination; yet the true source of the superstition is betrayed by the fact that the ghost continues to be regarded as occupying its former body or haunting the immediate neighborhood. This is, at any rate, the form in which the idea of exclusion from Hades most often meets us among the Greeks. It may be seen in the words with which Teiresias rebukes Kreon in the Antigone (1070 f.):

> ἔχεις δὲ τῶν κάτωθεν ἐνθάδ' αὖ θεῶν
> ἄμοιρον ἀκτέριστον ἀνόσιον νέκυν,

where, in the word *νέκυν*, the notions of soul and body seem confusedly blended. Some ghost stories of later date — as one told by Pliny (Ep. vii. 27), of which the scene is at Athens, and one by Lucian (Philopseudes 31) — illustrate the same belief. From this it is but a step to the vaguer language of Euripides (Troades 1081 ff.):

> ὦ φίλος ὦ πόσι μοι,
> σὺ μὲν φθίμενος ἀλαίνεις
> ἄθαπτος ἄνυδρος.

And this passage may serve as a transition to another form of the doctrine under examination.

In Hom. Ψ 71 ff., the spirit of the unburied Patroklos says to Achilles:

> θάπτε με ὅττι τάχιστα, πύλας Ἀΐδαο περήσω.
> τῆλέ μ' ἐέργουσι ψυχαὶ, εἴδωλα καμόντων,
> οὐδέ μέ πω μίσγεσθαι ὑπὲρ ποταμοῖο ἐῶσιν,
> ἀλλ' αὔτως ἀλάλημαι ἀν' εὐρυπυλὲς Ἄϊδος δῶ.

The topography implied here is highly indistinct, for Patroklos in one breath represents himself as without and within the gates of Hades. Still, in spite of haziness of detail, the main thought is plain: Patroklos is kept on the confines of the underworld. Now this is *prima facie* a different idea from the one previously illustrated. Haunting the neighborhood of the unburied body is not quite the same thing as wandering on the margin of the underworld; though no doubt, if a Greek had had the discrepancy brought to his attention, he

could have explained it away. Moreover, I believe that the former idea is earlier in time, in spite of its appearing later in Greek literature. It is wholly unsafe to assume without question, as is so often done, that beliefs and customs which meet us first in post-Homeric authors are of post-Homeric origin. Such an assumption must be tested by a wide survey of the development of human thought and institutions. Now the fancy expressed in Hom. Ψ, regarded as the initial form of the exclusion-idea, finds no very plausible explanation in primitive ways of thinking; whereas it is easy to see how it might have been developed as an offshoot from the simple natural notion that the unburied walk the earth, coupled with the belief in Hades as the proper home of the dead. Be that as it may, it is noteworthy that the idea of Hom. Ψ does not reappear in classical Greek literature, unless it be in Hom. λ. Here, after telling how Odysseus, having reached the appointed spot on the edge of Hades, dug a trench, and filled it with the blood which was to reanimate for a time the *νεκύων ἀμενηνὰ κάρηνα*, the poem proceeds (51 ff.):

> *πρώτη δὲ ψυχὴ Ἐλπήνορος ἦλθεν ἑταίρου·*
> *οὐ γάρ πω ἐτέθαπτο ὑπὸ χθονὸς εὐρυοδείης·*
> *σῶμα γὰρ ἐν Κίρκης μεγάρῳ κατελείπομεν ἡμεῖς*
> *ἄκλαυτον καὶ ἄθαπτον, ἐπεὶ πόνος ἄλλος ἔπειγεν.*

The commentators, ancient and modern,[1] say in substance: "Elpenor appeared first, because, his corpse having remained unburied, he could not go down *δόμον Ἄϊδος εἴσω*." (Merry.) But, in spite of this unanimity, I venture to doubt whether the poet had any such thought in mind. If one reads the whole episode through without prejudice, he will be struck by the absence of any explicit reference to Elpenor's being excluded from the society of the other shades. Even the suppliant himself, in his entreaty to Odysseus for burial, hints at nothing of the sort. And if his being the first to have speech with Odysseus must be accounted for, his own

[1] Faesi is apparently an exception. See his note on Ψ 72 (edition of 1865). Ameis and Koch, in their notes on ω 187, virtually unsay what they have said on λ 51.

eagerness to be heard would furnish a plausible enough reason. True, this ghost, unlike the rest, seems able to hold converse without drinking of the dark blood; and for this there is the old explanation that, not being yet admitted to the interior of Hades, he has not yet tasted of the water of Lethe. But, not to dwell on the fact that Homer appears to know nothing of Lethe, this explanation seems to me a case of treating "literature" like "dogma,"—an unwarrantable attempt to make a poetical picture square with a supposed doctrinal formula. The inconsistency is best left as the poem leaves it, unexplained; especially as the whole passage (lines 51–83) is open to strong suspicion of being interpolated. The idea, then, embodied in Hom. Ψ, that the soul of an unburied corpse is doomed to wander on the hither margin of the underworld, seems more like the fancy of an individual poet than an article of popular faith. The popularity of the Homeric poems must of course have made this fancy familiar to the Greek world, and Vergil elaborates it in the sixth book of the Aeneid; but if we may judge by the silence of post-Homeric Greek authors, it struck no deep root in the Greek mind, while at the most it was crowded and overshadowed by other conflicting ideas.

For it is now time to point out that entrance into Hades was commonly thought of as taking place at the moment of death, and that whether burial was to follow or not. The wide-spread belief in a subterranean realm of shades probably grows out of the custom of burial. "Hell," as M. Guyau puts it, "is nothing but an extended tomb." (Morale d'Épicure, p. 106.) But the Greeks, at the stage where we first meet them, were no longer distinctly conscious of this. Hades had come to be the proper home of all disembodied spirits: to it the spirit took its flight when life expired. Thus, to take a typical instance, we read (*Λ* 262 f.):

> ἔνθ' Ἀντήνορος υἷες ὑπ' Ἀτρείδῃ βασιλῆι
> πότμον ἀναπλήσαντες ἔδυν δόμον Ἄϊδος εἴσω.

More striking are the cases where the descent to Hades is mentioned in immediate connection with the fact of non-burial. Thus Achilles (*X* 344 ff.) refuses to the dying

Hector the rites of burial; but immediately after we read (361 f.):

> ὣς ἄρα μιν εἰπόντα τέλος θανάτοιο κάλυψεν,
> ψυχὴ δ' ἐκ ῥεθέων πταμένη Ἀϊδόσδε βεβήκει.

See also *H* 327 ff., and the familiar lines which begin the Iliad. But passages like these, though inconsistent with the notion of the soul's lingering in or near the unburied body, are reconcilable, it may be urged, with the language of Patroklos in *Ψ*. It is admitted that, standing by themselves, they would not prove much. But then they do not stand by themselves. The twenty-fourth book of the Odyssey is more circumstantial, and treats the presence of unburied men in Hades as a matter of course. Here the shades of the suitors are conducted by Hermes to the lower world. Their destination is left in no manner of doubt (11 ff.):

> πὰρ δ' ἴσαν Ὠκεανοῦ τε ῥοὰς καὶ Λευκάδα πέτρην,
> ἠδὲ παρ' Ἠελίοιο πύλας καὶ δῆμον Ὀνείρων
> ἤισαν· αἶψα δ' ἵκοντο κατ' ἀσφοδελὸν λειμῶνα,
> ἔνθα τε ναίουσι ψυχαί, εἴδωλα καμόντων.
> εὗρον δὲ ψυχὴν Πηληιάδεω Ἀχιλῆος
> καὶ Πατροκλῆος, κ. τ. λ.

And when one of their number has told to Agamemnon the story of their slaughter, he ends by saying (186 ff.):

> ὣς ἡμεῖς, Ἀγάμεμνον, ἀπωλόμεθ', ὧν ἔτι καὶ νῦν
> σώματ' ἀκηδέα κεῖται ἐνὶ μεγάροις Ὀδυσῆος·
> οὐ γάρ πω ἴσασι φίλοι κατὰ δώμαθ' ἑκάστου,
> οἵ κ' ἀπονίψαντες μέλαν βρότον ἐξ ὠτειλέων
> κατθέμενοι γοάοιεν· ὃ γὰρ γέρας ἐστὶ θανόντων.

Post-Homeric literature supplies illustrations of the same way of thinking.

> κεῖται δὲ νεκρὸς περὶ νεκρῷ, τὰ νυμφικὰ
> τέλη λαχὼν δείλαιος ἔν γ' Ἅιδου δόμοις,

says the messenger in the Antigone (1240 f.), while the bodies of Haemon and Antigone still lie where they had just fallen. Alkestis, in Euripides's drama, when about to die, sees Charon and Pluto waiting impatient (252 ff.):

> ὁρῶ δίκωπον ὁρῶ σκάφος,
> νεκύων δὲ πορθμεὺς

ἔχων χέρ' ἐπὶ κοντῷ Χάρων μ' ἤδη καλεῖ· τί μέλλεις;
ἐπείγου· σὺ κατείργεις.
. . . . . .
ἄγει μ' ἄγει μέ τις, οὐχ ὁρᾷς;
νεκύων ἐς αὐλὰν
ὑπ' ὀφρύσι κυανανγέσι βλέπων πτερωτὸς Ἅιδας.

Later, after her death, but before her burial, the chorus sing (435 ff.):

ὦ Πελίου θύγατερ,
χαίρουσά μοι εἰν Ἀίδα δόμοισιν
τὸν ἀνάλιον οἶκον οἰκετεύοις.
ἴστω δ' Ἀίδας ὁ μελαγχαίτας θεὸς ὅς τ' ἐπὶ κώπᾳ
πηδαλίῳ τε γέρων
νεκροπομπὸς ἵζει,
πολὺ δὴ πολὺ δὴ γυναῖκ' ἀρίστην
λίμναν Ἀχεροντίαν πορεύ-
σας ἐλάτᾳ δικώπῳ,

where the second sentence seems most naturally to imply that the passage in Charon's ferry-boat has already taken place. Again, Lucian suggests (De Luctu, 16) that, while a father is engaged in frantic funeral laments over the body of his son, the son might get leave of Aeakos and Pluto to slip out from his nether prison and remonstrate against this ill-judged grief. The soul, then, according to this, is already established in Hades before the funeral rites are performed. Still more to the present purpose is the story told in a scholium on Pindar, Ol. i. 97. According to this authority, Sisyphus, being near death, gave orders to his wife to leave him unburied. She obeyed; but he, descending to Pluto, accused his wife of neglect, and obtained permission to revisit the earth and punish her.

The evidence quoted in the two foregoing pages shows, not only that the Greeks were in the habit of speaking conventionally and thoughtlessly of the soul as departing to Hades immediately after death, but that this idea might be dwelt upon and developed into a picture or story, which, for the time being at least, seemed real. There is surely just as much reason, and just as little, for extracting from the twenty-fourth book of the Odyssey as from the twenty-third book of the Iliad a dogma, and representing it as *the* belief of the

Greeks. To complete our picture of the Greek state of mind on the matter, it remains only to show how easily and unconsciously the transition could be made by one and the same mind from one of the main ideas above considered to another contradictory one. Thus, although in Hom. Ψ the soul of the unburied Patroklos is repeatedly spoken of as in or on the confines of Hades, yet Achilles in the funeral procession "was conducting a blameless comrade to the house of Hades" (137). A much more striking and instructive example of the confusion and self-contradiction possible on the subject is afforded by the prologue of the Hecuba of Euripides. Here Polydoros begins by announcing:

> ἥκω νεκρῶν κευθμῶνα καὶ σκότου πύλας
> λιπὼν, ἵν' Ἅιδης χωρὶς ᾤκισται θεῶν.

But a few lines later, after telling how he had been killed and thrown into the sea, he says (28 ff.):

> κεῖμαι δ' ἐπ' ἀκταῖς, ἄλλοτ' ἐν πόντου σάλῳ
> πολλοῖς διαύλοις κυμάτων φορούμενος,
> ἄκλαυτος ἄταφος· νῦν δ' ὑπὲρ μητρὸς φίλης
> Ἑκάβης ἀίσσω, σῶμ' ἐρημώσας ἐμόν.

Here, then, in the space of thirty lines, are two inconsistent statements. Being a spirit, Polydoros belongs, as a matter of course, in Hades; but when the attention of the poet comes to be fixed on the unburied body, the first conception is gone, and a different one makes its appearance. Once more, the previously quoted lines of the Antigone (1070 f.), where Polyneikes is spoken of as τῶν κάτωθεν θεῶν ἄμοιρος, are contradicted by Antigone's hope (898 f.),

> φίλη μὲν ἥξειν πατρὶ, προσφιλὴς δὲ σοί,
> μῆτερ, φίλη δὲ σοί, κασίγνητον κάρα,

if the brother intended here is Polyneikes. Everything points to him rather than Eteokles, except the supposed necessity of harmonizing the words with a Greek belief in the exclusion from Hades of the unburied dead,—a consideration the weakness of which is now sufficiently apparent. Does not, in fact, this whole tragedy bear witness to the feeble hold which the belief in question had on the mind of Sophokles? If the

poet had believed in any vivid way that the admission of Polyneikes's soul to Hades depended on his burial, would he have represented the burial rites as performed a second and a third time? If the first burial carried Polyneikes across Acheron, what happened, one might ask, when the dust was brushed from his body? Was the soul haled back again, and was Charon kept busy through the day in ferrying him back and forth? But such a question is out of place. It was not raised at all by Sophokles nor by his audience. They were quite ready to entertain at any moment the thought that neglect of burial somehow kept the soul from reaching the new home toward which it yearned; but this thought was as far as possible from being an abiding and potent article of belief.

If an objection to this last statement should be based on the custom of putting an obol in the mouth of a corpse to pay the fare demanded by Charon, it might be answered that this custom was not universal (see Schömann, Griech. Alt., ii. p. 567, Anm. 1); but, apart from this, the literary evidence given above is sufficient proof that the interpretation of the custom by those who practised it could not have been clear-cut and authoritative.

But, in spite of all this, the feeling may still linger that the extreme importance attached by the Greeks to burial cannot be accounted for without allowing more weight to the exclusion-idea than I have done. To do justice to this objection would require an extended discussion; nor could the point be adequately treated apart from the development of religious customs generally. Briefly, the theory to which I adhere is, that burial, originating, like lustration, as a sanitary measure, came, like lustration, to be sanctioned by all the authority of immemorial usage and of religion. It was these factors which mainly determined the importance of the rite, though undoubtedly the exclusion-idea, in so far as it prevailed, contributed something in the same direction. With this view of the matter, Greek literature is well in accord. The subject of burial is treated there with remarkable frequency and fulness; as witness, e. g., the Funeral Oration attributed to Lysias, the

Aias and the Antigone of Sophokles, the Supplices of Euripides, and, in a lesser degree, the Seven against Thebes of Aeschylus, the Oedipus at Kolonos of Sophokles, the Phoenissae, the Helena, and the Hecuba of Euripides, not to speak of scattered passages in the historians and elsewhere. All this mass of evidence shows how strong in the Greek mind was the sentiment of the importance of burial; but it shows also, that in the maintenance of that sentiment the notion of the exclusion of the unburied from Hades had no commanding place. The expression of such a notion, considering the opportunities for it, is extremely rare. For the most part, Greeks accepted the importance of burial, like other matters of religious custom, without question; and when they did try to account for it, they were generally content to say that both the dead themselves and the infernal gods claimed this ceremony as their due.

III. — *The Crastinus Episode at Palaepharsalus.*

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THIS episode is told by Caesar himself as follows (B. C. iii. 91): "Erat Crastinus evocatus in exercitu Caesaris, qui superiore anno apud eum primum pilum in legione x duxerat, vir singulari virtute. Hic signo dato, 'Sequimini me,' inquit, 'manipulares mei qui fuistis, et vestro imperatori quam constituistis operam date. Unum hoc proelium superest; quo confecto et ille suam dignitatem et nos nostram libertatem recuperabimus.' Simul, respiciens Caesarem, 'Faciam,' inquit, 'hodie, imperator, ut aut vivo mihi aut mortuo gratias agas.' Haec cum dixisset, primus ex dextro cornu procucurrit, atque eum electi milites circiter cxx voluntarii eiusdem centuriae sunt prosecuti."

Whatever this deed of Crastinus was, it certainly received Caesar's heartiest approval, for he says, in stating his losses (c. 99. 2, 3): "Interfectus est etiam fortissime pugnans Crastinus, cuius mentionem supra fecimus, gladio in os adversum coniecto. Neque id fuit falsum, quod ille in pugnam proficiscens dixerat. Sic enim Caesar existimabat, eo proelio excellentissimam virtutem Crastini fuisse, optimeque eum de se meritum iudicabat."

Caesar's object in giving the Crastinus episode seems to have been, judging from the immediate context,[1] an illustration of the fiery zeal of his soldiers. Consequently he leaves us quite in the dark as to the precise nature, from a military standpoint, of the exploit which wins such praise from him, and subsequent writers throw no light upon it.

Lucan (Phars. vii. 470–473) makes Crastinus hurl the first weapon, shed the first blood, and so break the spell under

[1] Cf. c. 90, *fin.*: "Hac habita oratione exposcentibus militibus et studio pugnae ardentibus tuba signum dedit."

which the opposing armies stand when they realize the horrors which must follow their onset:

> "Di tibi non mortem, quae cunctis poena paratur,
> sed sensum post fata tuae dent, Crastine, morti,
> cuius torta manu commisit lancea bellum,
> primaque Thessaliam Romano sanguine tinxit."

Florus also (ii. 13 [= iv. 2], 46), who probably gives the general impression of the whole episode which he got from Livy, makes Crastinus open the battle, and considers the strangeness of the wound of which he died significant of the frenzy with which he fought: "Adnotatum quoque committentis aciem Crastini pilum, qui mox adacto in os gladio, sic inter cadavera repertus est; libidinem ac rabiem qua pugnaverat ipsa novitate volneris praeferebat."

Plutarch gives two distinct accounts of the episode, an earlier one in Caes. 44, a later one in Pomp. 71. These may be put side by side for closer comparison: —

CAES 44.

. . . . Αὐτὸς δὲ κινεῖν τὴν φάλαγγα μέλλων καὶ προϊὼν ἐπ' ἔργον ἤδη πρῶτον ὁρᾷ τῶν ταξιάρχων ἄνδρα πιστὸν αὐτῷ καὶ πολέμων ἔμπειρον ἐπιθαρσύνοντα τοὺς ὑφ' αὑτῷ καὶ προκαλούμενον εἰς ἅμιλλαν ἀλκῆς. Τοῦτον ὀνομαστὶ προσαγορεύσας, "Τί ἐλπίζομεν," εἶπεν, "ὦ Γάϊε Κρασσίνιε, καὶ πῶς τι θάρσους ἔχομεν;" Ὁ δὲ Κρασσίνιος ἐκτείνας τὴν δεξιὰν καὶ μέγα βοήσας, "Νικήσομεν," ἔφη, "λαμπρῶς, ὦ Καῖσαρ· ἐμὲ δὲ ἢ ζῶντα τήμερον ἢ τεθνηκότα ἐπαινέσεις." Ταῦτα εἰπὼν πρῶτος ἐμβάλλει τοῖς πολεμίοις δρόμῳ, συνεπισπασάμενος τοὺς περὶ ἑαυτὸν ἑκατὸν καὶ εἴκοσι στρατιώτας. Διακόψας δὲ τοὺς πρώτους καὶ πρόσω χωρῶν φόνῳ πολλῷ καὶ βιαζόμενος ἀνακόπτεται ξίφει πληγεὶς διὰ τοῦ στόματος, ὥστε καὶ τὴν αἰχμὴν ὑπὲρ τὸ ἰνίον ἀνασχεῖν.

POMP. 71.

Ὡς δ' οὖν τὸ Φαρσάλιον πεδίον ἀνδρῶν καὶ ἵππων καὶ ὅπλων ἀνεπέπληστο καὶ μάχης ἤρθη παρ' ἀμφοτέρων σημεῖα, πρῶτος ἐκ τῆς Καίσαρος φάλαγγος ἐξέδραμε Γάϊος Κρασσιανός, ἀνδρῶν ἑκατὸν εἴκοσι λοχαγῶν, μεγάλην ἀποδιδοὺς ὑπόσχεσιν Καίσαρι. Πρῶτον γὰρ αὐτὸν ἐξιὼν τοῦ χάρακος εἶδε καὶ προσαγορεύσας ἤρετο, πῶς φρονοίη περὶ τῆς μάχης. Ὁ δὲ τὴν δεξιὰν προτείνας ἀνεβόησε, "Νικήσεις λαμπρῶς, ὦ Καῖσαρ· ἐμὲ δὲ ἢ ζῶντα τήμερον ἢ νεκρὸν ἐπαινέσεις." Τούτων τῶν λόγων μεμνημένος ἐξώρμησε καὶ συνεπεσπάσατο πολλοὺς καὶ προσέβαλε κατὰ μέσους τοὺς πολεμίους. Γενομένου δὲ τοῦ ἀγῶνος εὐθὺς ἐν ξίφεσι καὶ πολλῶν φονευομένων, βιαζόμενον πρόσω καὶ διακόπτοντα τοὺς πρώτους ὑποστάς τις ὠθεῖ διὰ τοῦ στόματος τὸ ξίφος, ὥστε τὴν αἰχμὴν περάσασαν ἀνασχεῖν κατὰ τὸ ἰνίον.

The essential identity of these two accounts must be seen at once. The variation of the second from the first is no greater than a writer with Plutarch's aims would freely allow

himself in rewriting the episode, possibly from memory, or from brief notes and collections. The name of the veteran is Gaius Krassianus in the second version, Gaius Krassinius in the first. The colloquy between him and Caesar takes place as they are leaving the camp, according to the second version; but according to the first, just before the order to charge upon the enemy is given. In both versions the colloquy is virtually the same, in both Crastinus is commander of a hundred and twenty men, and in both his charge and death are described in the same way. The two versions are, moreover, of the same length. Indeed chapters 44–72 in the Pompeius, comprising the account of the first triumvirate and of the civil war down to the battle of Palaepharsalus, are not essentially different in spirit or incident from the account of the same period in the Caesar.[1]

Nor are the variations of Plutarch's first version from that of Caesar himself worthy of any emphasis. Plutarch makes the colloquy between Caesar and Crastinus occur just before the battle signal is given; Caesar says nothing of any appeal of his own to Crastinus, and makes the latter's speech to his comrades and vow to his general follow the battle signal. On the other hand, Plutarch's *ἐπιθαρσύνοντα τοὺς ὑφ' αὑτῷ καὶ προκαλούμενον εἰς ἅμιλλαν ἀλκῆς* may very well represent Caesar's "Sequimini me, manipulares mei qui fuistis," etc., the vow which the veteran makes his general is practically the same in Plutarch and in Caesar, and the general features of the charge and death of Crastinus are the same in both. Plutarch's addition of Caesar's address and question to Crastinus,—the *τί ἐλπίζομεν, ὦ Γάϊε Κρασσίνιε, καὶ πῶς τι θάρσους ἔχομεν;* of the earlier version, and the indirect *πῶς φρονοίη περὶ τῆς μάχης* of the later,—together with the corresponding answer of Crastinus to the question,—the *Νικήσομεν* (*Νικήσεις*) *λαμπρῶς, ὦ Καῖσαρ,*—may be embellishments of Plutarch's own, or items which he found in the account given by Asinius Pollio, to which he at least had access, if he did not make it his sole authority.[2]

[1] Cf. H. Peter, Die Quellen Plutarchs in den Biographieen der Römer (Halle, 1865), pp. 117, 118.

[2] H. Peter, ibid., pp. 123–126.

The fact is worthy of emphasis, however, that Plutarch, with a probable command of that Pollio who was an eye-witness of the battle and a censor of certain inexactnesses in Caesar's Commentaries,[1] makes Crastinus commander of a troop of one hundred and twenty men. This fact ought to be decisive against Göler's arbitrary alteration of Caesar's words, and therefore against his explanation of the whole episode, resting so largely as this does upon his reconstructed text.[2]

To these accounts of the Crastinus episode may be added, more to make the list complete than for any new features which it gives us, that of Appian (Bell. Civ. ii. 82): *Τοῦτο τέλος ἦν τῆς ἀοιδίμου περὶ Φάρσαλον μάχης. Ἀριστεῖα δ' ὁ μὲν Καῖσαρ αὐτὸς καὶ πρῶτα καὶ δεύτερα ἐκ πάντων ἐφέρετο, ὁμολογούμενος ἀριστεῦσαι, καὶ σὺν αὐτῷ τὸ τέλος τὸ δέκατον· τὰ δὲ τρίτα Κρασσίνιος λοχαγός, ὃν Καῖσαρ μὲν ἐξιὼν ἐπὶ τὴν μάχην ἤρετο ὅ τι προσδοκῷη, ὁ δὲ λαμπρῶς ἀνεβόησε, "Νικήσομεν, ὦ Καῖσαρ, κἀμὲ τήμερον ἢ ζῶντα ἢ νεκρὸν ἀποδέξῃ." Ἡ στρατιὰ δ' ἐμαρτύρει, καθάπερ ἔνθουν ἐς ἑκάστην τάξιν μεταθέοντα πολλὰ καὶ λαμπρὰ δρᾶσαι. Ἐπεὶ δὲ ζητούμενος ἐν τοῖς νεκροῖς ηὑρέθη, τὰ ἀριστεῖα ὁ Καῖσαρ αὐτῷ περιέθηκε καὶ συνέθαψε, καὶ τάφον ἐξαίρετον ἀνέστησεν ἐγγὺς τοῦ πολυανδρίου.* Peculiar to this version of the episode are the repeated stress laid on the *ἀριστεῖα* or prizes of valor in the battle, the complete indefiniteness in describing the actual exploit of Crastinus, and the statement that he received separate burial. The version otherwise agrees minutely with the first of Plutarch, so minutely as to justify the belief, strengthened by many verbal coincidences elsewhere,[3] that the two historians took the episode from a common source, probably Pollio.[4]

It must be confessed now that we have not the necessary

[1] The *locus classicus* is Suet. D. Iul. 56.

[2] Caesar's Gallischer Krieg und Theile seines Bürgerkriegs,[2] ii. p. 176.

[3] Cf. H. Peter, ibid., p. 125.

[4] That Appian did not use Plutarch is shown by Wijnne, De Fide et Auctoritate Appiani (Groningae, 1855), p. 53 f.; and by Wichmann, De Plutarchi in Vitis Bruti et Antonii Fontibus (Diss. Bonn., 1874), p. 9. Thouret, in Leipz. Stud., i. p. 333 ff., argues that neither Appian nor Plutarch used Pollio directly, but a Greek excerpt of his history of the civil war between Pompey and Caesar. This view is controverted by Basiner, Quaestiones Caesarianae (Diss. Dorpat., 1883), Pars I. p. 5 ff.

data for deciding definitely upon all the variations in these different accounts, but, remembering that in their general features all the accounts substantially agree, we may consider the following as the most probable outline-sketch of the Crastinus episode. On leaving the camp Caesar hailed a certain centurion, Crastinus by name, and asked what he thought of the prospects. Crastinus replied, "We shall conquer gloriously, Caesar, and to-day, alive or dead, I shall win your praise." Just as Caesar gave the battle signal, therefore, Crastinus made a stirring appeal to his fellow soldiers, charged foremost upon the enemy, followed by a large company, and died in the thick of the fight, with a sword run through his mouth and neck.

It is not improbable that Caesar, in his own account of the affair, whether consciously or not, transposed the centurion's vow from the colloquy at the leaving of the camp (which he does not give at all), and joined it to the appeal to the soldiers just after the battle signal (which appeal he alone gives in full); while Plutarch, finding the colloquy in Pollio put at its proper time, and wishing possibly to unite the details given by Pollio and Caesar,[1] did so in his first version by transferring both colloquy and vow, as given by Pollio, from the time of leaving the camp to the moment before the charge, and by making the hortatory speech of Crastinus, as given by Caesar, the immediate occasion of the colloquy, but returned in his second version to the chronology of Pollio, omitting all notice whatever of the hortatory speech. Still, however much might be said in support of this view, the conclusion, from the nature of the evidence, can never be a certain one.

To this outline-sketch of the episode, uniting the main features of all the accounts, I wish to add several specific features, which may fairly be deduced from Caesar's words, but about which there has been either uncertainty, vague statement, or wide diversity of opinion.[2]

[1] It is highly improbable that Plutarch did not at least consult the Commentaries of Caesar, whether he made them his chief authority or not.

[2] Cf. Rüstow, Heerwesen und Kriegführung Caesars[2] (Nordhausen, 1862), p. 30; Göler, *op. cit.* ii. p. 176 f.; Marquardt, Römische Staatsverwaltung, ii. p. 376;

Caesar told the episode, as has already been said, merely to illustrate the spirit which filled his troops, and did not try to describe just what Crastinus was, just what commission he had received, or just what his exploit actually was; and yet all these points can be decided by a careful study of Caesar's words.

1. What was Crastinus?

"Erat Crastinus evocatus in exercitu Caesaris"; — there was, in the army of Caesar thus sent by the battle signal against the enemy, Crastinus, an *evocatus*. The distinction between the three classes of veteran soldiers, *beneficiarii*, *evocati*, and *voluntarii*, has been stated by no one better than by Göler.[1] All soldiers who had seen service, whether their time was up or not, were called *veterani*, in distinction from *tirones*, or raw recruits. All veteran soldiers were *beneficiarii*, if they enjoyed any special privileges or immunities in the service. Of the *beneficiarii* whose terms had expired, those who had accepted lands as a special reward for service could be called out (*evocati*) for new campaigns, and were under obligations to answer the call; those who did not receive such lands, when called anew into service could respond to the call or not, and if they did, were *voluntarii*. The *voluntarii*, then, were a special class of *evocati*. A *voluntarius* was an *evocatus*, but not every *evocatus* was a *voluntarius*.

When Caesar began his military career in Gaul, Pompey was already a general of many and long campaigns, and the matter of lands to give his veteran soldiers was important enough to become a political question. He was not then so vain, after all, when he boasted, just before the outbreak of the civil war, that wherever in Italy he should stamp upon the ground, armies would rise up for him (Plut. Pomp. 57, *fin.*). Caesar says (B. C. i. 3. 2): "Multi undique ex veteribus

the Kraner-Hofmann edition of Caesar's Civil War, *ad loc.*; Johannes Schmidt, Hermes, xiv. pp. 332 f., 348; Drumann, Geschichte Roms, iii. p. 513 f.; Merivale, History of the Romans, ii. p. 232; Long, Decline of the Roman Republic, v. p. 205; Willmann, Adnotationes quaedam ad C. Julii Caesaris Relationem Pugnæ Pharsalicae (Halberstadii, 1875), p. 6 f. The statements of Rüstow are by far the most satisfactory.

[1] *Op. cit.*, ii. p. 237 f.

Pompei exercitibus spe praemiorum atque ordinum evocantur, ... completur urbs veteranis,[1] comitium tribunis, centurionibus, evocatis." At the battle of Palaepharsalus, according to the same authority, Pompey's *evocati* numbered about two thousand (B. C. iii. 88. 5): "Haec erant milia XLV, evocatorum circiter duo, quae ex beneficiariis superiorum exercituum ad eum convenerant; quae tota acie disperserat." So numerous were they that Pompey hoped to give firmness to his line by stationing them along its whole length. Caesar's military career, on the other hand, had not been long enough for the growth of any large body of *evocati*, if of any, in the strictest sense of the word. His men were all veterans, but there had been no interval in his campaigns during which they could enjoy farms and homes. He may well have had, however, *voluntarii*, veterans whose terms of service had expired, but who, without going home to enjoy their rewards, accepted of their own accord their general's invitation to remain in his service. Such an *evocatus* was Crastinus, and Caesar uses this word instead of *voluntarius*, either because he felt no need of making the distinction with the purpose which he had in mind in relating the episode, or because *evocatus* was more freely used in the singular than *voluntarius*.[2]

2. What commission had Crastinus received?

The year before he had been *primipilus* in the tenth legion, i. e. head centurion of Caesar's pet legion, the one which was now stationed on the right wing, over against Pompey and the flower of his soldiers, where the fate of the day was to be decided. Crastinus had therefore reached the topmost round of promotion in the career of the common soldier when his term of service expired. As head centurion of the tenth legion he had commanded directly the whole maniple of the Pilani,

[1] The reading suggested for the corrupt *et ius* of the Mss. by Schenkl, Philol. 28, p. 115.

[2] The lines of distinction between these words were probably not yet sharply drawn. *Evocati* is used technically only once in Caesar's B. G., vii. 65. 5, and the soldiers designated can hardly have been other than *emeriti*, *voluntarii*. For the introduction in Caesar's time of this technical use of the word *evocati*, to meet a new feature in military service, see Schmidt, Hermes, xiv. pp. 328 f., 352. It is found only six times in Caesar's B. C.

the body forming the front and right of the first cohort in the front line of battle.[1] His hortatory speech, beginning, "Sequimini me, manipulares mei qui fuistis," was addressed to this body of soldiers on the extreme right of the front line of battle, who stood nearest him, but no longer directly under his command. Their courageous advance was sure to be closely imitated by the whole cohort, legion, and line.

But Crastinus, at the extreme right of the first line of battle, was not alone, nor acting under any mere roving commission. His charge was not a hastily conceived and impulsive deed, but one which Caesar had, in all probability, commissioned him to make. The hundred and twenty picked soldiers (*electi milites*) who immediately followed him as he dashed forward from the right wing (*primus ex dextro cornu procucurrit*), were not his old manipulars. This would have thrown the whole battle array of the tenth legion into confusion, and produced a straggling skirmish attack; whereas we know that Caesar's whole line advanced evenly, halted midway to take breath when Pompey's lines were seen to remain stationary, and then renewed the charge (Caes. B. C. iii. 93. 1). Caesar had long surmised that Pompey would make the struggle depend on his ability to turn his enemy's right wing with his enormous body of cavalry. Caesar had therefore taken special precautions to strengthen this right wing. Two of these precautions he mentions. One was to re-enforce his own small body of cavalry with picked infantrymen (c. 84. 3–5). A second was to put his best legion, the tenth, where Pompey's special attack was to fall (c. 89. 1). A third precaution he does not specifically mention, but our episode shows what it was. Next to the extreme front and right cohort of the tenth legion he had commissioned Crastinus to stand, at the head of a hundred and twenty *voluntarii* like himself (*voluntarii eiusdem centuriae*), and had ordered him, as soon as the battle signal should be given, to lead these veterans in a special charge before the regular line of battle, to inspire thus the whole line to make a bolder attack, and to throw the enemy's extreme left into some confusion before the tenth

[1] Göler, *op. cit.*, ii. p. 228, § 27.

legion should reach and rout it. Even if Pompey's cavalry had succeeded, then, in overwhelming Caesar's smaller troop of horsemen, they would have been recalled from any attempt to follow up their advantage and turn Caesar's flank, by the discomfiture of the left wing of Pompey's infantry. This third precaution may well have been determined upon some days before the battle, during the preliminary manœuvres described in c. 84. The fact that Crastinus had received this special commission, whose tactical importance he would perfectly understand, makes the colloquy between him and his general, as the army drew out of camp, and Caesar's question how the prospects appeared to him, perfectly natural, as well as the vow of the veteran that his general's confidence should not appear to have been misplaced. Caesar omits to mention this colloquy, as foreign to the purpose with which he gives the episode, and possibly transfers the vow which immediately followed it to the close of the centurion's harangue to those soldiers of the tenth legion standing nearest him. The words *voluntarii eiusdem centuriae,* then, are added to explain specifically the indefinite *electi milites,*[1] and are to be rendered "*voluntarii* of the same troop," i. e. of the same troop as Crastinus, the troop which he now specially commanded, in distinction from his old manipulars of the tenth legion, whom he calls upon to follow him. They were to follow, not in the forlorn-hope charge of the *voluntarii* (*prosecuti*), but in the regular advance of the whole line, and could feel sure of finding gaps in the front of the enemy's left when they got there.

This interpretation calls for a brief comment on the use of the word *centuria.* It no longer denoted, except in very rare cases,[2] one of the two platoons of the maniple. For this the technical term was *ordo.*[3] *Centuria,* like our *troop* or *company,* could still be used of any considerable body of men

[1] Willmann, *op. cit.,* considers "electi milites" a special technical designation, like *voluntarii,* or *evocati.* This is certainly not Caesar's usage even of *electi* alone.

[2] B. C. i. 64. 4, 76. 3, and this passage, exhaust the possible cases in Caesar, and even in the first two the word may be used in a general rather than a technical sense. See Willmann, and cf. Marquardt, *op. cit.,* ii. p. 334.

[3] Rüstow, *op. cit.,* p. 5.

outside the regular legion formation of about the size of a maniple (*circiter* cxx), and is probably so used here. That this *centuria* contained no more than one hundred and twenty men cannot be positively decided from the language of Caesar (*voluntarii eiusdem centuriae*). Bearing in mind, however, the shortness of Caesar's military career (p. 52), and also the fact that his legionaries numbered hardly half those of Pompey, viz. twenty-two thousand to forty-five thousand (cc. 88, 89), one hundred and twenty need not seem altogether improbable as representing the whole number of Caesar's *evocati* (*voluntarii*), even over against Pompey's two thousand. Besides, we have the repeated testimony of Plutarch that Crastinus commanded one hundred and twenty men (p. 47). But it does not necessarily follow that Caesar massed all his *evocati* (*voluntarii*) under Crastinus. Such an inference from his so prominently mentioning the fact that Pompey scattered his own *evocati* all along his line of battle (c. 88. 5) is at best uncertain.

The bearing of this view of the commission of Crastinus on the question what the *antesignani* were, is negative, but important. Caesar does not call the troop which Crastinus commanded *antesignani*, but *voluntarii*. So the author of the Bellum Africanum, in a passage cited[1] to uphold the old view that the *antesignani* were a special detached corps in each legion,[2] speaks not of *antesignani*, but of *expediti*, a word of as general meaning as *electi*. The new view that the *antesignani* were the four front cohorts in the legion's usual line of battle is so well upheld by Göler,[3] that it is strange to find him, in his impossible interpretation of the Crastinus episode, neglecting to compare it with the exploit of the *antesignani* at Ilerda (B. C. i. 43).

3. What was the exploit of Crastinus?

It was to set an inspiring example to Caesar's whole line of battle, and especially to the tenth legion, on whose suc-

[1] Jahns, in Bursian's Jahresbericht, 1881, ii. p. 208. See also, ibid., the summary of Planer's "Caesars Antesignanen."

[2] Marquardt, *op. cit.*, ii. p. 343.

[3] *Op. cit.*, ii. p. 37, note 4.

cess the fate of the day had been made to depend, by leading a large body of re-enlisted veterans in such a fierce charge upon the enemy's extreme left that it was thrown into some confusion, and would have been easily driven back when the shock of the onset of the regular line came, had not Crastinus fallen. Caesar had planned the movement as one of three precautionary measures which should frustrate Pompey's known design of turning his right wing. These measures would probably all have proved in vain, had it not been for a fourth precaution, which seems to have flashed into Caesar's mind at the last moment. Pompey concentrated even more strength upon his left wing than Caesar had anticipated (c. 88, *fin.*). Fearing then the certain defeat of his own cavalry in spite of the fact that they had been strengthened by infantrymen, in which case everything would have depended upon the success of Crastinus and the tenth legion, Caesar formed the famous *quarta acies*, which, in concert with his cavalry, crushed so utterly the hopes of Pompey (c. 89. 4; 93. 5–8). But even when this *quarta acies*, after routing the cavalry of Pompey, had fallen in one and the same charge (*eodem impetu*) upon the rear of his infantry left, this was still holding its ground bravely against the tenth legion (*pugnantibus etiam tum ac resistentibus*). Crastinus had fallen. Pompey's left had fought better than Caesar had thought they could against his favorite tenth legion, even after a path had been opened up for it into the enemy's ranks by the *voluntarii;* but when the cavalry of Pompey scurried off to the hills, and Caesar's *quarta acies* fell upon the rear of Pompey's left wing, the death of Crastinus and the failure of his exploit to accomplish all that had been intended by it were more than made good. Pompey's left wing broke and fled; and now Caesar ordered up his reserves, the *tertia acies*, when Pompey's whole line followed the shattered left wing. Caesar had not merely foiled the tactics of his enemy, but turned them back upon him with complete success. As Florus so well puts it (ii. 13 [= iv. 2], 47): "Sed nec minus admirabilior illius exitus belli. Quippe cum Pompeius adeo equitum copia abundaret, ut facile circumventurus sibi Caesarem videretur, circumventus ipse est."

Very discriminating is Caesar's estimate of his obligations for this victory; first and foremost, the *quarta acies:* "Neque vero Caesarem fefellit quin ab iis cohortibus quae contra equitatum in quarta acie collocatae essent initium victoriae oriretur" (c. 94. 3). But to Crastinus, even though only partially successful, he gives that praise for which the veteran was willing to die: "Sic enim Caesar existimabat, eo proelio excellentissimam virtutem Crastini fuisse, optimeque eum de se meritum iudicabat."

IV. — *Alliteration in Latin.*[1]

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THE Latin language shares with other languages a disposition to emphasize an idea by some form of repetition, as by the reduplication of the root, the iteration of the same word or words, anaphora, the *figura etymologica*, assonances in any part of a word, puns, and rhyme: but in the manifold uses of *alliteration* the Latin probably goes far beyond any other cultivated speech. Alliteration is here used in its narrowest sense, the recurrence, namely, of the same initial letter (or its phonetic equivalent) in two or more contiguous words. There are abundant indications of its existence in the popular language, and in religious and legal phraseology, even before the rise of any regular literature. It is especially prominent in the earlier writers of the Republic: it obtrudes itself with over-frequency in Ennius and Plautus, — the former often playing with it as with a newly acquired toy, the latter employing it for merely comical effects; in Terence it so far fades away as to escape observation unless it is sought for; in Lucilius, who protested against the devices and mannerisms of rhetoricians and grammarians, it is comparatively though not altogether ignored; in the fragments of Pacuvius, and, still more, of Accius, it again becomes very conspicuous; in every book of Lucretius there are hundreds of palpable instances; it again declines in the poets of the Augustan age, except in Vergil, whose verse is full of illustrations, though here as elsewhere the imperial laureate shows his exquisite taste by treating alliteration strictly as a means to higher ends. Though there

[1] Free use has been made of these works: — Naeke, *De Allitteratione Sermonis Latini*, Rhein. Mus., 1829; Maehly, *Ueber Allitteration*, Neues Schweiz. Mus., 1864; Jordan, *Beiträge zur Geschichte der latein. Sprache*, Berlin, 1879; Kvičala, *Beiträge zur Erklärung der Aeneis*, Prag, 1881; and, especially, Wölfflin, *Die Allitterierenden Verbindungen der latein. Sprache*, München, 1881.

are many cases of conscious alliteration in all the great prose writers of Rome, it can hardly be called a peculiarity of any but Cicero and Sallust, and perhaps Tacitus, and then, through a kind of renaissance, of Fronto and Apuleius. In all these writers, and in its sporadic appearance elsewhere, alliteration is found much more frequently with consonants than with vowels, and in poetry its favorite place is at the end of the verse. Thus Lucretius and Vergil are very fond of throwing the fifth and sixth feet of the hexameter into detached and alliterative words. Kvíčala counts 277 instances of this movement in the Aeneid; in the fifth book of Lucretius it certainly occurs more than fifty times.

It might fairly be asked if the decline of alliteration, and its displacement in verse by rhyme, — like the displacement of quantity by accent, — have not been a loss to literature. Less obtrusive and less inevitable than rhyme, less amenable to laws of position and recurrence, very often much less mechanical, it seems to me to contribute an æsthetic enjoyment of a higher and more delicate order.

Though the word *alliteration* seems to have been invented by Pontanus in the fifteenth century, the Romans were certainly aware that the device was in use among themselves. Thus the author of the Rhetorica ad Herennium (iv. 12) calls it "eiusdem litterae nimia assiduitas." Donatus remarks on the *solus Sannio servat* of Terence (Eun. 780), "Haec figura *παρόμοιον* dicitur." In connection with Vergil's *casus Cassandra canebat* (A. iii. 183) Servius says: "Haec compositio iam vitiosa est, quae maioribus placuit, ut *Anchisen agnoscit amicum* (A. iii. 82), et *sale saxa sonabant* (A. v. 866)." Significant, too, is the dictum of Martianus Capella (De Arte Rhet. 33): "Compositionis vitium maximum est non vitare cuiuslibet litterae assiduitatem in odium repetitam." Spartianus, in his Life of the Emperor Geta (5), says: "Habebat etiam istam consuetudinem ut convivia et maxime prandia per singulas litteras iuberet scientibus servis, velut in quo erat *anser, apruna, anas,* item *pullus, perdix, pavus, porcellus, piscis, perna,* et quae in eam litteram genera edulium caderent, et item *fasianus, farrata, ficus,* et talia."

Those who to-day doubt, as Lachmann doubted,[1] the presence of alliteration as a characteristic in Latin diction, should in this particular compare such contemporary and fairly comparable writers as Lucretius and Catullus, Cicero and Caesar, Vergil and Horace. And it is difficult to see how any one can deny this large presence who comes upon such passages as these from representative writers: —

"O Tite tute Tati tibi tanta tyranne tulisti." Enn. Ann.

"Africa terribili tremit horrida terra tumultu." Ibid.

"At tuba terribili sonitu taratantara dixit." Ibid.

"Maior mihi moles, maius miscendumst malum." Accius, Atr.

"Non potuit paucis plura plane proloqui." Plaut. Men. 252.

"Quanta pernis pestis veniet, quanta labes larido,
quanta sumini absumedo, quanta callo calamitas,
quanta laniis lassitudo." Id. Capt. 900.

"Viva videns vivo sepeliri viscera busto." Lucr. v. 993.

"Neu patriae validas in viscera vertite vires." Verg. A. vi. 833.

"Ita sensim sine sensu aetas senescit." Cic. de Sen. xi.

The grammarian Diomedes gives this line, which is probably a cento from the second Aeneid: —

"Machina multa minax minitatur maxima muris."

Less on the surface than in the above extracts, but very effective and artistically very beautiful, is the alliteration in this descriptive passage from Ennius: —

"Incedunt arbusta per alta, securibus caedunt,
percellunt magnas quercus, exciditur ilex,
fraxinus frangitur atque abies consternitur alta,
pinus proceras pervertunt: omne sonabat
arbustum fremitu silvai frondosai."

Vergil's (A. vi. 179–182) imitation of the last passage well illustrates the different management of the same peculiarity by the two poets.

Of course a distinction must be made between accidental alliteration and that which is clearly premeditated, and statistics and theories are worthless which are based upon the natural and almost unavoidable juxtaposition of alliterative

[1] *Allitteration*, in Ersch und Gruber's Encyclopädie.

words. It should be said, too, that to quite an exceptional extent the Latin contains words of the same initial letter which naturally often appear together. Among such common phrases are *virtutes vitia, longus latus, publicus privatus, maximus minimus, plebs populusque, populus et patres, doceo disco, toga tunica, victus vestisque, flumina fontes, prope procul, ager aedes, aequo animo, aurum argentum, fundo fugo, aes alienum, septem sapientes.* Caesar's "*Veni vidi vici*" (Suet. J. C. 37) seems as natural in form as it is comprehensive in content, though Plutarch (Caes. 50) appears to have noticed only its rhyme, not its alliteration. Nor does one see how Christ's description of himself (John xiv. 6) was to go into Latin except with alliteration: "Ego sum *via* et *veritas* et *vita*."

The common impression that alliteration in Latin originated in poetry seems clearly a mistake. It is hardly to be found in the extant fragments of the oldest verse, as in the hymns of the Arval brethren and of the Salii; but it is found in many very ancient phrases and formulae of a popular and priestly and juridical character. These are some of the alliterative proverbial expressions, many of which demonstrably antedate the appearance of formal Latin poetry: — *Vivus videnque* (Ter. Eun., Lucr. iii., Cic. Sest.), *oleum et operam perdere* (Plaut. Poen., Cic. passim), *nec vola nec vestigium* (Varro), *sex septem, acus aciaeque* (Titinius, Petron. 76), *inter os et offam* (Cato), *inter manum et mentum* (Id.), *inter sacrum saxumque* (Plaut. Capt., Apul.), *vitio vertere, semel saepius, cave canem, ad carceres a calce* (Varro, Sat., Cic. de Sen., Id. de Am.), *sine fuco ac fallaciis* (Cic. Att. i. 1), *cras credo* (Varro), *est modus matulae* (Id.), *mutuum muli scabunt* (Id.), *fortes fortuna* (Ter., Cic., et al.), *sucus et sanguis* (Cic. Br. Att. iv. 16), *sudor et sanguis* (Enn., Cic., Plin. Ep., Tac. G.), *ad restim res redit* (Caecil., Ter. Ph.), *satis superque, viva vox, a vestigio ad verticem* (Plin. N. H. vii. 77), *albus an ater, nec vas nec vestimentum* (Ter. Heaut., Cato, Sall. C.). In Aulus Gellius (xiv. 2) *vox viva* is set proverbially against *muti magistri* (books), while Cicero (de Leg. iii. 1) defines *magistratus* as *lex loquens*, and *lex* as *mutus magistratus*.

Here are some alliterative religious and legal expressions of

great antiquity: — *Di duint, felix faustum fortunatumque, sit salvus sator salva sint sata* (Cato), *ius iudiciumque, manus et mancipium, tabulae testesque, sane sarteque, purus putus* (Aul. Gell. vii. 5), *arae et altaria, tecta templa, templa tesca, per lancem liciumque, pater patratus, sacro-sanctus.* The directors of the mint were called *triumviri auro argento aeri flando feriundo* (Orelli, Insc. 569); sellers of swine guaranteed that their wares were free *a febri et a foria* (Varro, R. R. ii. 4); the praetor solemnly uttered his *do dico addico;* of the Senate it was reported *censuit consensit conscivit* (Liv. i. 32). Rome's faithful allies were called *fortes fideles* (Liv. passim), her enemies were often described as *fusi fugati,* and to her foreign envoys and public guests were assigned *loca lautia.* The traditional epithets of several divinities attest the great antiquity of alliteration; as, *Dea dia, mater matuta, bona* (once *duona*) *Dea, Venus victrix, Iuno iuga, Fors Fortuna.* Observe, also, *Venus volgivaga* (Lucr. iv.), and such combinations of gods and heroes as *Iuppiter Iuno, Vulcanus Vesta, Romulus Remus, Titus Tatius, Semo Sancus, Picumnus Pilumnus.* Among the marriage divinities was a *Deus domiducus* (August. C. D. vi. 9).

Noteworthy in the cases of alliteration, amounting almost to a law in the earliest instances, is the frequency of asyndeton.

But the object of this paper is rather to present some philological aspects of alliteration than to treat it on its rhetorical or historical sides.

The argument in regard to the guttural sound of *c* before all vowels is amply confirmed by alliteration; indeed, were we without other guides as to the ancient pronunciation of this letter, this guide alone would be almost conclusive. Of abundant examples in all periods and styles, these may suffice: — *quae cava corpore caeruleo cortina receptat* (Enn.), *cava caerula candent* (Id.), *claudus caecus mutus mancus* (Plaut. Merc.), *cito cursim* (Id. Poen.), *cedo calidum consilium cito* (Id. Mil.), *crispus crassus caesius* (Ter. Hec.), *carmina cantu concelebrare* (Lucr. v.), *cymbala circum concava* (Id. ii.), *caeca caligo* (Lucr., Verg.), *cum caedes cum civium cruor cum cinis* (Cic. pro Sulla), *caedes incendia* (Cic., Tac., passim), *certus clarus* (Ter., Cic., Hor., Liv.), *comitia consulum cum candidatis civiliter celebrans* (Tac. H. ii. 91).

Even among progressive Latinists there is some tendency to approximate the sound of *o*, in many positions, to that of *a*. The tendency seems to me to be a vicious one from every point of view, and to be against the teaching of such evidently alliterative and frequently occurring combinations as *oro obsecroque, ora oculique, oleum et operam perdere, opera aut otium, ope atque opera.* Equally valuable is the negative evidence from the apparent absence of examples of *o* and *a* in alliteration. Had the two vowels sometimes been uttered alike, we should expect to find them brought together. Thus, we do find *au* combined with *o* in the plebeian or colloquial speech; as, from Plautus, *aurum orichalcum, ope auxiliumque, aurata ornata, omen auspicium.* More frequently, however, *au* is found in conjunction with its first element; as, *agenda audendaque, alit auget, aluit auxit armavit* (Cic. Att. viii. 3), *auctor actor, adiuvant augent amant* (Plaut. Men.), *altas aëris auras* (Lucr. iii.), *attentas aures animumque* (Id. vi.), *animus atque aures avent avide* (Enn. Trag.).

The seemingly studied juxtaposition of initial *ae* and *a*, and the apparent lack of examples of *ae* and *e*, are of some weight against the theory that *ae* was pronounced like *e*, or approximately like it. Thus, *anni aetas vox vires* (Cato contra Galb.), *agere aetatem, agere aevum, aequo animo, aes alienum, ager aedes, aeris acervus et auri* (Hor. Ep. i. 1), *animo aegra amore saevo saucia* (Enn. Trag.). This does not affect the evidence that early among the peasants, and much later quite generally, *ae* and *e* were practically identified.

It is well known that a Latin *l* is sometimes the representative of *d*, and that *du* sometimes sank to a *b*. Having the testimony of Roman grammarians that *lacrima* was once *dacrima*, as well as the forms of the word in cognate languages, we do not hesitate to read *dacrima* in Ennius's Epitaph, which is otherwise rich in alliteration: —

> "Nemo me dacrimis decoret nec funera fletu
> faxit: cur? volito vivus per ora virum."

The combinations *domi bellique* and *bona Dea* in all probability had their origin in a fondness for alliteration in the days when *belli* and *bona* were *duelli* and *duona*.

The alliterative union of vocalic and consonantal *u* has been denied, as by Wölfflin[1]: but there is certainly some support for a different view, and *pro tanto* an argument for the proper pronunciation of consonantal *u*, in such expressions as *transversum unguem, ab unguibus usque ad verticem* (Cic. Rosc. Com.), *qui vobis universis et populo placent* (Ter. Ad. prol.), *utilius veru in sulco quam gravis galea in proelio* (Syrus); Horace's *quid valeant umeri* (A. P. 40) is certainly in an alliterative neighborhood, and Lucretius appears to have wished to fill with the *u* sound this line, — *ventorum validis fervescunt viribus undae* (iii. 493). It should here be borne in mind that vowels were employed alliteratively much less often than consonants.

In the sequence of alliterative words, if but one contains the vowel *a*, it usually follows, — certainly in the classical period. This principle naturally holds in prose more than in poetry, and it has been already said that in the dactylic hexameter there is a fondness for throwing the alliterative words into the last two feet of the verse. In illustration of this general rule, I give *ferro flammaque, longe lateque, colles campique, silvae saltusque* (Lucr., Verg., Tac.), *multi et magni, potus atque pastus* (Cic. Div. i. 60), *plebs patresque, mitis et mansues* (Aul. Gell. v. 14), *membra manusque, mundus magnus* (Lucr. passim), *moles magna* (Acc., Verg.), *lepidus et lautus* (Plaut., Ter.), *gloria et gratia, fundere fugare, fides fama, crispus crassus caesius* (Ter. Hec.), *video et valeo, certus clarusque, nec cor nec caput, vince et vale.*

If the words in alliteration are unequal in length, the shorter one usually precedes. Thus, *aurum argentum, acer acutus, bonus benignus, cursus certamenque* (Plin. Ep. viii. 20), *cura custodiaque* (Ibid. vii. 19, Cic. Fam. xv. 2), *gerrae germanae, ferus ferreus, fortis fidelis, vinctus verberatus, verba verbera, cor corpusque, fama fortuna, pudor pudicitia, damnum dedecus, fons fundamentum, dat dicat dedicat, nec vas nec vestimentum, vietus vetus veternosus* (Ter. E. 688), *porro penitus penetrata* (Lucr. i.), *male monita memoria* (Caecil.), *magistratus lex est loquens, lex autem mutus magistratus* (Cic. de Leg. iii. 1).

[1] *Ueber d. allit. Verbindungen der lat. Sprache,* p. 4.

In textual criticism and in exegesis some help has been derived from alliteration, and this legitimate source is likely to be more and more resorted to. In Cicero's quotation[1] (T. D. i. 16) from some ancient poet the manuscripts differ between *falso sanguine* and *salso sanguine.* As sense and tradition hesitate between the readings, alliteration may well decide in favor of *salso.* Kvíčala[2] avails himself of this aid in trying to settle the text and meaning of more than three hundred places in the Aeneid, though probably very few will assent to all his conclusions. From his examples I select a few. In iv. 460, *voces* rather than *gemitus* is almost required by the alliterative context:

> "Hinc exaudiri voces et verba vocantis
> visa viri."

If nothing else can decide between *ciet manes* and *movet manes* (iv. 490), alliteration may pronounce for the latter. The very effective and varied repetition of sounds in vi. 683,

> "Fataque fortunasque virum moresque manusque,"

seems conclusive against Peerlkamp's change of *manus* to *animos.* It has been a question from the early Roman commentators to the latest American editors[3] whether, at vi. 806, Vergil wrote *virtutem extendere factis,* or, as is favored by the resulting alliteration, *virtute extendere vires.* And perhaps by Vergil's undeniable fondness for alliteration we may best explain his use of *mores* in *mores et moenia* (i. 264), where we might look for *leges* or *iura,* and his odd phrase *pubes tuorum* in *puppesque tuae pubesque tuorum* (i. 399),[4] and his bold expression *auri aura* (vi. 204), and his puzzling employment of *secat* in *quam quisque secat spem* (x. 107).

[1] See J. Maehly, Neues Schweiz. Mus., 1864, p. 229.
[2] *Neue Beiträge zur Erklär. der Aeneis,* pp. 387–415.
[3] Greenough (1881) *v. e. v*; Frieze (1883) *v. e. f.*
[4] Quint. ix. 3. 75: "Verbum verbo non dissimile valde quaeritur."

V.—*On the Relation of the Anglo-Norman Vowel System to the Norman Words in English.*

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THE introduction of Latin elements into the English language is due to four principal causes: the occupation of Britain by the Romans, the conversion of the Britons to the Christian Church, the conquest of England by the Normans, and the revival of classical learning in the sixteenth century. We are therefore accustomed to speak of these elements respectively as Latin of the first, second, third, and fourth period.

This division is not altogether satisfactory. It accounts, for instance, for *leal* and *loyal* on the one hand, and *legal* on the other, the first two being Latin of the third period, the third Latin of the fourth period; but it fails to explain the doublet *leal* and *loyal*. A similar group is *peer*, *pair*, and *par*, and others will be mentioned in the course of this investigation. Again, there is a class of words, a fair specimen of which is *require*, which is decidedly classical Latin in form, and which we should therefore suppose to belong to the Latin of the fourth period; yet it is found in Chaucer. Subdivisions of the above classes are therefore needed, if we wish to account for the various forms in which Latin words appear in English.

The words belonging to the first two classes are so well known and so few in number that we need not dwell upon them. The third class, however, is the most important one, the words belonging to it being very numerous, and next to the Anglo-Saxon constituting the most important element in the English language.

At the time of the Norman conquest there was no French language in the modern sense of this word, but instead of it

we have a number of dialects, the principal ones being the Wallonian, the Norman, the Picard, the Burgundian, and that of the Île-de-France. The last-named dialect, of which the Modern French is the direct descendant, possessed during the eleventh century no pre-eminence whatever over the other dialects, but, considering both its literary productions and its territorial extent, it was perhaps the least important of them all. These four dialects must be regarded as independent developments of the Low Latin, and not as having grown out of a common French type.

The French words which were introduced into English during the first centuries following the Norman conquest came of course directly from the Norman dialect, or rather from that particular species of it known as the Anglo-Norman, which was the original Franco-Norman transplanted on English soil and left there to independent development. In consideration now of the great differences which existed between the phonetic system of the Anglo-Norman dialect and that of the Old French proper, it would certainly be a great mistake to look in the Old French for the original types of this class of Romance words in English. We have to go to the Anglo-Norman dialect. This seems so perfectly plain and self-evident that it is strange it should ever have been overlooked. Nevertheless, works on English etymology pay, as a rule, no attention to it. Mr. Skeat in his Dictionary constantly derives English words from their Old French (Île-de-France) cognates, without troubling himself to account for the strange changes which their pronunciation and orthography must have undergone were they to be derived in that fashion, — changes which cannot be explained by phonetic laws known to have worked on English soil, and which Mr. Skeat occasionally disposes of by using the very convenient, but rather unscientific, term "corruption." (Compare the article on *mister*.) A knowledge of the peculiar forms which these words had in Anglo-Norman will at once reveal the fact, not only that no corruption has taken place, but that the original Anglo-Norman forms have in many cases been remarkably well preserved, making allowance, of course, for

the changes which the English phonetic system in general has undergone since the Norman conquest, particularly by the mutation of vowel sounds.

This may be illustrated by the following example. The earliest and most common Middle-English form of *hour* is *ure*, Ancren Riwle, pp. 6, 8, 20, etc. Mr. Skeat refers us to OF. *hore*, *heure;* he pays no attention to the ME. *ure*, but gives us only the later Chaucerian *houre*. The matter is very simple: the Norman dialect has a preference for *u*, and substitutes it, as a rule, for Latin *ō* where we have *ou* or *eu* in the French proper. Hence we get from Latin *hōra* the Anglo-Norman *ure*, Set Dormanz, l. 767, Petit Plet, ll. 168, 548, etc. This gives us the ME. *ure* mentioned above, which then passes into the MOD.E. *hour*, just as most other ME. *ū*'s pass into MOD.E. *ou;* viz. ME. *hūs* > MOD.E. *house*, ME. *ūt* > MOD.E. *out*, etc. Were we now to derive our word, as Mr. Skeat does, from the OF. *hore*, we should have *hor(e)* in ME. and *hoor(e)* in MOD.E.; for as a rule ME. *ô* passes into MOD.E. *oo;* for instance, ME. *bone* > MOD.E. *boon*, ME. *lome* > MOD.E. *loom*, ME. *mone* > MOD.E. *moon*, etc. Here is, then, a clear case of Modern English pronunciation and spelling being directly traceable to the Anglo-Norman vowel system.

In the following pages I propose to show how far the influence of the Anglo-Norman vowel system extends; but before doing so it would be well to state that we cannot expect to find perfect regularity, and give the reason why.

In the first place, there existed dialectic differences within the Anglo-Norman itself, which future investigations may classify according to time and locality. Then again, while it is right to assume that every Englishman acquiring the use of a new Norman word endeavored to pronounce it to the best of his sense of hearing and his capacity of reproducing, it is equally natural to suppose that his attempts to pronounce the new sounds exactly as the Normans pronounced them were as a rule unsuccessful. As far as the English side is concerned, it would thus be useless to go into the niceties of Anglo-Norman phonetics. It is impossible to suppose that the English distinguished in hearing and in pronunciation

the five or six *e* sounds which Chardry never mixes in his rhymes. (Vid. Koch, Einleitung, pp. 25, 26.) Again, the preference of any given English dialect for its own peculiar sounds must in each case have influenced the pronunciation of Norman words, and it is hence perfectly natural that the same word was pronounced and spelt in different fashions by English writers living in different localities. A thorough treatment of this subject should therefore be based on a complete glossary of all Norman words occurring in Middle-English classified according to time and locality. Unfortunately, such a glossary does not exist. Attempts toward such a collection have indeed been made, but what has been produced is untrustworthy.[1] Mr. Skeat's work is an invaluable help, to be sure, since the Middle English references are numerous and generally exact; but of course not all the Middle English forms are given, and the author, misled by Modern English spelling, which is largely influenced by Modern French, is apt to give us exceptional forms rather than the more regular ones.[2]

This brings up another point, which will go far toward

[1] I refer particularly to the collection given in Morris's "Outlines of English Accidence." By a comparison with my own glossary, I find, for instance, that out of a total of 92 Romance words occurring in "King Horn" Mr. Morris has omitted 20, or about 22 per cent; viz. *arme* (840), *cheres* (403, 1063), *age* (1324), *wicket* (1074), *still* (and horn let the tires *stille*, 676), *sire* (805, etc.), *seint* (665), *rivere* (230), *rive* (132), *fris* (898), *preie* (763), *lay* (1477), *joye* (1346), *ile* (1318), *heirs* (897), *geaunt* (802), *fine* (262), *feste* (477), *faille* (638), *dute* (344). The compiler evidently did not go through the text, but simply glanced through Lumby's very incomplete glossary, as will be seen from the fact that *denie* is mentioned as a French word, being evidently taken for the ME. *deny*, while the passage where it occurs reads, "al þe curt gan *denie*," meaning, of course, "the whole court resounded," *denie* being the AS. *dynnan*, MOD.E. to *din*. By a similar mistake, *pure* is counted as a Norman word, but the passage where it occurs reads, "Aþulf was in the ture — abute for to pure," meaning, in order to "peer" about; *peer* is a good Anglo-Saxon word.

[2] Mr. Skeat depends for his Old French forms largely on Burguy's Glossary in the "Grammaire de la Langue d'Oïl," and from among the abundance of Old French dialectic forms that are given there he does not always select those peculiar to the Norman, which are most likely to explain English pronunciation, English orthography being largely under the influence of the French proper. Often he gives us a whole set of Old French forms which are in no way important for English. Comp. the article on *juggler*.

explaining many irregularities, namely, the influence which spelling and pronunciation of one set of Romance words in English have exercised upon spelling and pronunciation of another. If the English were ever conscious of the Anglo-Norman as a dialect distinct from, but equally legitimate with, the French proper, it seems that they had lost this consciousness very soon; for while in the earliest Middle-English Norman words are found in precisely the same form which they have in the dialect, later writers are found to be more and more under French influence. Thus only the most striking characteristics of the Anglo-Norman were preserved in English; minor peculiarities were lost. Many words which in the earliest Middle-English appear in a pure Anglo-Norman garb, are later refashioned after a French model. Sometimes, however, the Anglo-Norman word had gotten a hold on the popular language, and in that case it was preserved by the side of its French cognate. Still later, both forms were subject to being remodelled after a Latin fashion to suit the etymologizing tendency of the period of the Renaissance; sometimes the older forms would stand, and a third or Latin form would be added to form a triplet.

More correct, then, than the division cited above would be the following classification of Latin elements introduced into English later than the Norman conquest:—

1. Norman words: *leal*, ME. *real*, *feeble*, *peer*, *mister*, *leisure*, *defeat*, *grief*, *dainty*, *frail*, *conquer*, ME. *acqueren*, etc.

2. French words: *loyal*, *royal*, *foible*, *pair*, *master*, *poise*, *coy*, etc.

3. Latin words: *legal*, *regal*, *par*, *magister*, *defect*, *grave*, *dignity*, *fragile*, *acquire*, *quiet*.

A word may therefore belong either to one of these classes, like *leisure*, *poise*, or to two, like *defeat* and *defect*, *coy* and *quiet*, or to all three, like *leal*, *loyal*, and *legal*. On the other hand, it may belong to one class at a certain period, and to another class at another period, like ME. *acqueren* and MOD.E. *acquire*. In the following pages I propose to show the relation of the first class to the other two, as far as the vowel system is concerned.

I. The Vowels e and i.

A. *ē and ĭ.*

The vowels *ē* and *ĭ* of the Classical Latin passed in Low Latin into one sound, which was undoubtedly that of an *é fermé*. (Comp. Romania, x. p. 36.) This sound passed in the common Old French into *ei*, and later, probably through the influence of the Eastern dialects, into *oi*. In Norman it was preserved as *ei*, but especially in the later Anglo-Norman it is subject to contraction. Thus we have: —

Lat. *rēgem* > AN. *rei*, SD. 223, F. *roi*.
" *lēgem* > " *lei*, SD. 224, F. *loi*.
" *fĭdem* > " *fei*, Jos. 73, F. *foi*.
" *quĭd* > " *quei*, Jos. 40, F. *quoi*, etc.

In English words of Norman origin this peculiarity of the Anglo-Norman dialect is very well preserved; for although in Modern English the original *ei* is graphically represented in many different ways, yet it has regularly an *e* or *i* sound; the French *oi* is found only exceptionally.

a. Latin Tonic *ē* and *ĭ* in Open Syllables (*ē* and *ĭ* "libre").

feeble. Lat. *flēbilis* > AN. *feble*, SD. 155, Jos. 1115 > ME. *feble*, AR. pp. 54, 56, 136, etc. > MOD.E. *feeble*. — The OF. form *foible* (MF. *faible*) gives us the doublet *foible*.

faith. Lat. *fĭdem* > AN. *fei*, SD. 234 > ME. *fey*, Havelock 255, later with E. suffix > *feith*, *feyth*, *faith*. OF. *foi*, *foit*.

veil. Lat. *vēlum* > AN. *veil* > ME. *veil*, AR. p. 420. F. *voile*.

parish. Lat. *parēcia* (*paroecia*) > ME. *parische*, Chaucer. F. *paroisse*. Derivative: *parēcianum* > ME. *parishen* > MOD.E. *parishion-er*.

heir. Lat. *hēres* > A.N. *heir*, PP. 1101 > ME. *eir*, *eyre*, *heire*, *heyre*, Chaucer, William of Pal. F. *hoir*.

beverage. **bib(ĕ)rat(i)cum* > *beverage*, Shak. W. T. i. 2. 346. According to its vocalism, the word must have been used before Shakespeare's time. OF. *boivre*, hence *boivrage*, *bovrage*. MF. *breuvage*.

ME. **curteys.** Lat. *cortēsis* (for *cortensis*) > AN. *curteis*, PP. 1215 > ME. *corteys*, *curteys*, William of Pal.; corrupted > MOD.E. *courteous*. Derivative: AN. *curteisie*, PP. 281, *curtesie*, SD. 1223, PP. 1012 > ME. *kurteisie*, *kurtesie*, AR. pp. 70, 416. F. *courtois*, *courtoisie*.

eyre. Lat. *ĭter* > N. *eire:* "le *eire* des feluns perirat," Bartsch, Chrestomathie Franç. 53. 20, in a Norman translation of the Psalms. The OF. form is *oire* or *err.*

prey. Lat. *prēda* > N. *preie,* Bartsch, Quatre Livres des Rois 59. 2 > ME. *preie, preye,* Rob. of Gl. F. *proie.*

trey. Lat. *trēs* > N. *treis,* Chanson de Roland 275, 995 > ME. *trey,* Chaucer. F. *trois.*

money. Lat. *monēta* > AN. *munee,* SD. 532 > ME. *muneie, moneie,* Chaucer. OF. *monoie,* MF. *monnaie.*

lamprey. Low Lat. *lamprēta* > ME. *laumprei, laumpree,* Havelock. F. *lamproie.*

array. Low Lat. *arrēdium* > N. *arreie* > ME. *arraie, arraien.* OF. *arroi, arroier.*

fair. Lat. *fēriae* > N. *feire* > ME. *feyre, feire.* F. *foire.*

ME. **secree.** Lat. *secrētum* > AN. *secrei, segrei,* Jos. 826 > ME. *secre, secree,* Chaucer, Piers Plowm. OF. *secroi,* but under Lat. influence both MOD.E. and MF. *secret.* The correct Middle English form is preserved in *de-cree,* ME. *decre, decree,* Robert of Brunne, Chaucer, while we have a combination of the two in *discreet,* ME. *discret,* Piers Plowm.

receive. Lat. *recĭpere* > AN. *receivre, recevre,* Jos. 817 > ME. *receiven, receyuen,* Piers Plowm. OF. *reçoivre,* MF. *recevoir.* Likewise *decĭpere* > AN. *deceivre,* Jos. 958, 963, *decevre,* PP. 1636 > E. *deceive, decĕpit* > AN. *deceit,* SD. 1878; also *conceive, perceive; conceit, receipt.*

ceil, ceiling. Lat. *cēlum* > ME. *syll, cyll, seile,* a canopy > MOD.E. *ceil, ceiling.* This is the only French word in which Lat. *ē* is represented by *ie,* for the *ie* in the two other words given by Brachet, *cimetière* and *chantier,* is due to metathesis.

manor. Lat. *manēre* > ME. *maneir, manere,* Piers Plowm., changed under French influence (F. *manoir*) > MOD.E. *manor.*

purpess. This spelling is etymologically more correct than *porpoise.* Lat. *porcus piscis* gives in AN. *purpeis,* or *purpes,* comp. *peissun* (*piscis*), SD. 396, ME. *purpeys,* Prompt. Parvulorum. F. *poisson.*

In all these words the Norman *ei* (Lat. *ē* or *ĭ*) is rendered in English by an *e* or *i* sound. We come now to the consideration of some real or apparent exceptions.

void. Lat. *vĭduus.* This is only an apparent exception. Lat. *vĭduus* gives us in Old French two forms: (1) *void,* by the

regular diphthongization of *ĭ* = *fĭdem* > *foid*, *foit*; (2) *vuid*, by a transposition of the *u*. The E. *void* may come either from *void*, for the latter is found in Norman (Chanson de Roland, CXIII.), or from *vuid*, just as *destroy* from *destruire*, *annoy* from *ennuyer*. The MF. *vide* is a "mot savant."

coy. Lat. *quietum*. This is a more difficult case. *coy* is a decidedly French form; the Norman form is *quei*: "Icels d'Alverne .... se cuntiennent plus *quei*," Chanson de Rol. 3797. The English form should therefore be *quei* or *quay*.

Before nasals Lat. *ē* becomes *ei* in common Old French and remains so in Modern French; e. g. *vēna*, F. *veine*, E. *vein*; *rēnes*, F. *rein*, E. *reins*, etc.

b. LATIN PRETONIC *ē* AND *ī* IN OPEN SYLLABLES.

Generally the same rule holds good as for *tonic ē* and *ĭ*.

convey. Lat. *convĭā're* > AN. *conveier*, *conveer* (*enveier*, *enveer* occur in Jos. 988, SD. 367) > ME. *conveien*, and under French influence *convoien*, hence MOD.E. *convoy* and *envoy*.

leisure. Lat. *lĭcē're* > AN. *leisir*, PP. 703 > ME. *leyser*, *leysere*. OF. and MF. *loisir*.

purvey. Lat. *provĭdē're* > AN. *purveier*, *purveer*, SD. 439, 1427 > ME. *purveien* > MOD.E. *purvey*, doublet *provide*. Derivative: AN. *purveance*, PP. 941 > E. *purveyance*, doublet *providence*. AN. *purveiur* > E. *purveyor*. Thus also *survey*, *super-vĭdēre*.

covet. Lat. *cupĭtā're* (Skeat's *cupiditare* is an impossibility) > AN. *cuveiter*, *cuveter*, SD. 1861, PP. 1412 > ME. *coueiten*, *cuveten*. Derivative: AN. *cuveitus*, PP. 35 > E. *covetous*. OF. *co(n)voiter*, MF. *convoiter*.

tourney. Lat. **tornĭare* > AN. *turneier*, *turneer* > ME. *turneyen*. Derivative: *tournament* (for *turnement*, AR. p. 390). OF. *tournoi*, *tournoiement*, *tournoyer*.

ME. **viage**, Chaucer; *veage*, Rob. of Gl. Lat. *vĭáticum*, AN. *veage*, Jos. 2856. The etymologically correct ME. form has been crowded out by the F. form *voyage*.

ME. **real.** Lat. *rēgā'lem* > ME. *real*, Chaucer, C. T. 1020. Crowded out by the F. *royal*, probably to avoid confusion with E. *real*, from L. *realis*, but survives in the derivative *realm*, L. *rēgālimen*, F *royaume*, doublet *real*, a Spanish coin. Thus also L. *lēgā'lem* > E. *leal*, doublet *loyal*.

The Latin infinitive termination *-ĭare* becomes *-y* in English: *varĭā're* > *vary*, **studĭā're* > *study*, etc.

Only one word in this class has a decidedly French form, viz.: —

poise. Lat. *pēsā're* (for *pensare*). The Norman form is *peiser:* "d'Oliver li *peiset* mult forment," Chanson de Roland, 2514; and *peisen* actually occurs in Piers Plowm. Hence, if no French influence had been brought to bear on it, the Middle English form would be *peise* (or *peese, pease*).

Just as the common Old French *ei* resulting from Lat. *ē* or *ĭ* becomes *oi* in the French proper, and remains *ei* in Norman, so does the *ei* coming from other sources change to *oi* in French proper, but remains *ei* in Norman. The other most important source of *ei* is a Latin *e* attracting a following *i* or a guttural or palatal vocalized to *i;* e. g. L. *mĕdiā'num* > N. *meien, meen,* OF. *moien,* MF. *moyen.* The Norman form gives us the English *mean.*

Other examples: —

ME. **peitrel.** Lat. *pectorale* > ME. *peitrel, petrel,* Chaucer. The F. form *poitrel* is also found.

bennet (proper name and botany *Geum Urbanum*). Lat. *benedictum* > AN. *beneit, benet* Jos. 406, SD. 1688, PP. 406 > E. *bennet.* OF. *benoit,* MF. *benoît.* Derivative: *beneiçun, beneisun,* Jos. 1588, PP. 54, 1535 > ME. *beneisun,* Havelock > ME. *benison.*

pray. Lat. *prĕcā'ri* > AN. *preier, preer* Jos. 2647, but also *prier* SD. 1716 > ME. *preien, preyen,* KH. 769, 1200 > MOD.E. *pray.* OF. proper *proier,* but also (under Norman influence?) *preier,* contracted > *prier.* Derivative: AN. *preere,* Jos. 1382, SD. 1720, 1841 > ME. *preiere, preyere,* Chaucer > MOD.E. *prayer.*

praise. Lat. *prĕtiā're* > AN. *preiser,* SD. 1084, PP. 898 > ME. *preisen,* AR. pp. 64, 74, 144, etc. > MOD.E. *praise.*

defeat. Lat. *disfectum* > AN. *defeit, defet* > ME. *defeiten, defeten,* Chaucer. Likewise *discomfit, discomfiture.*

strait. Lat. *strictum* > *strectum* > N. *estreit, streit,* Chanson de Roland, 1001, 2202 > ME. *streit,* Lay. 22270 > MOD.E. *strait.* OF. *estroit,* MF. *ètroit.*

dean. Lat. *dĕcā'num* > AN. *deien, deen* > ME. *den, deen, dene,* Piers Plowm. > MOD.E. *dean.* OF. *doien,* MF. *doyen.*

The diphthong *oi* is found only in words of decidedly later introduction, — for instance, *adroit,* according to the Dictionary of the English Philological Society first used by Evelyn, A. D. 1652. Had the word been introduced during the Anglo-Norman period, it would be *adreit,* comp. Jos. 3: "la *dreite* veie de salu."

The terminations *-erium* and *-eria* which appear in French as *-ier* and *-ière* are in Norman regularly represented by *-er* and *-ere*, and in this form they also appear in English: —

manner. Lat. **maneria* > AN. *manere*, SD. 79 > ME. *manere*, Lay. *b*, II. 373, AR. 6, 136 > MOD.E. *manner*. F. *manière*.

matter. Lat. *materia* > AN. *matere* > E. *matter*. F. *matière*.

mystery, or **mistery**, (a trade,) corrupted from ME. *mester*. Lat. *ministerum* > AN. *mester*, Jos. 302, 1827, PP. 1125 > ME. *meister*, AR. 70, 212, *mester*, AR. 72, 210, etc., *mistere*, Chaucer. The later form *mistery* may have been brought about by confusion with AN. *mestrie*, Jos. 768, 2191, SD. 1224, which comes from L. *magisteria*.

The "terminaison savante" *-erie* is occasionally found, e. g. *materie*, AR. p. 270, and it survives in a few Modern English words of later introduction, as in *cemetery*, F. *cimetière*.

B. *Latin ĕ in Open Syllables* (*ĕ* "libre").

a. Tonic.

Latin *ĕ*, which in common Old French is usually diphthongized, is as a rule retained in Anglo-Norman as a simple vowel; e. g. *bref*, SD. 475, *sege*, SD. 1871, etc. Middle English orthography generally agrees with the Anglo-Norman; but in Modern English *ie* is often written, although it is pronounced as a simple vowel. We give some examples: —

brief. Lat. *brĕvem* > AN. *bref*, SD. 475 > ME. *bref*, *breef*, Piers Plowm., AR. p. 344, etc. > MOD.E. *brief*. Compound: ME. *embreven*, AR. p. 344.

siege. Lat. **sĕdium* > AN. *sege*, SD. 1871 > ME. *sege* = seat, throne, AR. p. 238 > MOD.E. *siege*. F. *siège*.

rear. Lat. *rĕtro* > AN. *rere* (*arere*, SD. 1484, PP. 200) > ME. (*ar*)*rere*, Piers Plowm. F. *arrière*.

fierce. *fĕrus* > AN. *fers* (adv. *ferement*, SD. 951) > ME. *fers*, Chaucer, C. T. 1598 > MOD.E. *fierce*. F. *fier*. — This is a very curious word, in that it is the only Norman adjective which has been taken into the English language in its nominative form, *fierce* standing of course for *fier-s*; and this is the more remarkable because it exists in French as an original accusative.

piece. Low Lat. *pĕtium* > AN. *pece*, SD. 1504 > ME. *pece*, Robert of Gl. > MOD.E. *piece*. F. *pièce*, etc.

b. PRETONIC.

Latin pretonic *ĕ* in open syllables is usually preserved in French as well as in Anglo-Norman and English: —

tenant. Lat. *tenentem* > N. *tenant.* F. id.

precious. Lat. *prĕtiosum* > AN. *precius,* Jos. 720 > ME. *precius, precious,* Piers Plowm. F. *précieux.*

congeal. Lat. *congĕlā're* > ME. *congelen,* Gower, etc.

In one case the pretonic *ĕ* has become *i*: *ĕbŏrea* > ME. *ivory, ivorie,* also *every* (Prov. *evori,* Bartsch, 33. 22). F. *ivoire.*

Latin pretonic *ĕ* and *ĭ*, if accented in English, are treated like *ē*: *ordĭnā're* > AN. *ordener* > ME. *ordeynen,* Piers Plowm. > MOD.E. *ordain.* Likewise all the compounds with *tĕnē're*: AN. *meintenir,* Jos. 1730, SD. 16 > ME. *mainteinen, maintenen,* King Alisaunder; *contain, obtain, sustain, abstain, retain, entertain.*

C. *Latin ī in Open Syllables* (*ī* "libre").

Preserved in French as well as in Anglo-Norman and English: Lat. *pīca* > F. *pie,* E. *pie;* Lat. *diffīdā're* > F. *défier,* E. *defy,* etc. The termination *-ī'a* is always unaccented in English: *phantasī'a* > ME. *fantasie,* Chaucer, C. T. 6098 > MOD.E. *fancy.*

D. *Latin e and i entravé.*

A vowel is called *entravé* when it is followed by any two consonants, except (1.) *pr, br, tr, dr,* in which cases it is considered to stand in open syllables; and (2.) *cr, gr, pl, bl,* or any consonant + a palatal, in which cases it is called variable. (Romania, x. p. 37.) In common Old French, and also in Norman, every *i entravé* becomes *e;* e. g. *firmum* > *ferme, mittere* > *mettre,* etc. Hence for our purpose *i entravé* and *e entravé* amount to the same thing, and may be treated under one head. As a rule, the *e entravé* of the common Old French and of the Norman remains in Middle English, but in later English it is subject to the same change of pronunciation as every other ME. *e.* Hence: —

beast. Lat. *bestia* > OF. *beste* > ME. *best,* AR. pp. 120, 128, 134, etc. > MOD.E. *beast.* MF. *bête.*

feast. Lat. *festa* > OF. *feste* > ME. *feste,* AR. p. 22, etc. > MOD.E. *feast.* MF. *fête.*

seal. Lat. *sigillum* > *sigellum* > OF. *seel* > ME. *seel* > MOD.E. *seal.* MF. *sceau.*

search. Lat. *circare* > AN. *cercher*, PP. 1334 > ME. *serchen, cerchen* > MOD.E. *search, research*, etc. F. *chercher.*

preach. Lat. *prēdicare* > AN. *precher*, SD. 87, 1824 > ME. *prechen*, AR. pp. 70, 260. Likewise Lat. **impĕdicare* > ME. *empechen, apechen*, > MOD.E. *impeach*, etc.

conquer. Lat. *conquī'rere* > AN. *cunquerre*, Jos. 2249, PP. 404 > ME. *cunqueren, cunqueren*, Rob. of Gl. > MOD.E. *conquer.* MF. *conquérir.*

acquire and **require** are treated in Anglo-Norman and in Middle English just like the preceding; e. g. AN. *requerre*, Jos. 1021, ME. *requeren*, Chaucer, C. T. 6634, etc.; but they were afterwards remodelled after the Latin; *aquire*, according to the Dictionary of the E. P. S., about 1600 (Shakespeare's Hamlet).

The Latin combinations *ng* and *gn* are represented in Norman by a single or double nasal; e. g. *feinnez*, Jos. 1484 (2d plur. pres. from *feindre*, L. *fingere*), F. *feignez; cumpainnie, cumpainnun*, Jos. 317, 2346, SD. 277, 443, etc. The *e* and *i* are then treated as usually before nasals. In Middle English the Anglo-Norman model is followed, but in Modern English orthography the original *g* is often restored, though it is never pronounced. Thus we have *dignare*, N. *deinen*, ME. *deinen*, Gower, Rob. of Gl., MOD.E. *deign*, but *disdain*, F. *deigner.* Similarly: *reign* (L. *regnare*), *feign* (L. *fingere*), but p. part. *faint, attain* (L. *attingere*), *restrain* (L. *restringere*), *taint* (p. part. L. *tingere*), *paint* (p. part. formed by analogy to *taint*), *refrain* (L. *refringere*, perhaps confused with *refrenare*), etc.

The word *sue*, which belongs to this class, is rather troublesome, but no more so than in French itself. Lat. **sequere* gives us in OF. *sevre, sivre*, and, probably by a double influence of the *v*, *suivre.* In ME. we have *sewen, siwen, suwen*, Lay. *b*, I. 59, II. 264, AR. p. 208. It is not impossible that the noun *suite* may have influenced the English verb; *suite* comes of course from *secuta, s'cuta*, not from *secta*, as Skeat absurdly proposes. The latter would have given us *seat* in English, just as *disfectum* gives us *defeat.*

There was a tendency in the Anglo-Norman dialect, as well as in the Old French proper, to change the sound of *e* before *r* + consonant into *a*. This was probably due to the nature of the *r*, but the greatest irregularity prevails. Thus we have in French: *par* (L. *per*), *lézard* (L. *lacerta*), *lucarne* (L. *lucerna*), *parchemin* (L. *pergamenum*), *marchand* (L. *mercatantem*), *appartenir* (L. *appertinere*), etc.; but on the other hand: *personne* (L. *persona*), *clerc* (L. *clericum*), *aper-*

cevoir (L. *ad* + *percipere*), etc. In Anglo-Norman we find the same inconsistency: *sarmuner*, PP. 182 (L. **sermonare*), *aparcevre*, Jos. 2471, PP. 428, 435, etc., *marchant*, *marchandise*, Jos. 697, 713, etc., *parfit*, PP. 513, etc.; but on the other hand: *rehercer*, Jos. 941, *mervillus*, SD. 1235, *certein*, PP. 32, etc. In English this phonetic tendency has left many traces, and the best evidence of the irregularity with which it works is the fact that sometimes those words which in Anglo-Norman and French appear with *a* have *e* in English, and *vice versa*; e. g., N. and F. *marchand*, E. *merchant*; F. *merveilleux*, N. *mervillus*, E. *marvellous*; E. *parsley*, F. *persil*; E. *partridge*, F. *perdrix*. Other examples of *-ar-* in English are *parson* (doublet of *person*), *garland*, *war*, *parrot*, *garner*, *tarnish*, *varnish*, *quarrel*, etc. There are certainly many more words occasionally pronounced with *-ar-* instead of *-er-*, and *-ar-* is often written in proper names, e. g. *Sargent*, *Clark*, etc.

II. The Vowel a.

A. *In Open Syllables* (*except before n*).

In French the Latin *a*, whether long or short, is usually represented by an *e* sound, written *e* or *ai*, in a few cases also by *ie*: *căput* > F. *chef*; *nāsum* > F. *nez*; *măre* > F. *mer*; *amārum* > *amĕr*; *tālem* > F. *tel*; *cārum* > F. *cher*; *clārum* > F. *clair*; *pār* > F. *pair*; *cănem* > F. *chien*; *grăvem* > F. *grief*. The Anglo-Norman dialect prefers as a rule simple vowels to diphthongs; hence we find: *per* (L. *pār*): "truver ne pout l'em sun *per*," Jos. 170, 2935, SD. 323, PP. 1424, etc.; *cler* (L. *clārum*), PP. 58. In Middle English we find *e* in most cases, but in Modern English some differences in pronunciation and spelling exist. Thus we have: —

peer. Lat. *pār* > AN. *per* (cited above) > ME. *pere*, Chaucer > MOD.E. *peer*. Doublets: *pair*, a French form, and *par*, a Latin form. With irregular change of vowel: *non* + *par* (meaning impartial) > ME. (*n*)*umpere*, (*n*)*ompere* > MOD.E. *umpire*.

cheer. Lat. *cara* > *chere*, Jos. 1502 > ME. *chere*, AR. pp. 88, 192, 212, etc.; Lay. *b*, II. 371, "þat al sculen þine *cheres* — iwurðen swulc þes eorles" > MOD.E. *cheer*, F. *chère*: "fair chère lie."

friar. Lat. *frātrem* > N. *frere*, Chanson de Roland, 1214, etc. > ME. *frere*, Chaucer > MOD.E. *friar*, probably through *frère*.

clef. Lat. *clāvem* > E. *clef*, formerly also *cliff*.

degree. Lat. *de* + *grădum* > ME. *degre*, *degree*, Chaucer.

die. Lat. *dătum* > ME. *dee, die*, Chaucer > MOD.E. *die, dice.* The E. form *die* looks as though it were due to an OF. form *diet* instead of *det;* but it may also be nothing but an irregular vowel change, just like *umpire* for *umpeer*, above.

agree. Lat. *ad* + *grātum* > AN. *a gre*, Jos. 2561, v. *agreer* > ME. *agrëen*, Chaucer. Etc.

In the case of suffixes the language is of course more regular.

-tātem gives us in AN. regularly *-te*, the same in ME., and *-ty* in MOD.E.: Lat. *pietatem* > AN. *pite*, SD. 360 > ME. *pite*, AR. p. 368 > MOD.E. *pity*, MF. *pitié; civitātem* > AN. *cite*, SD. 85 > ME. *cite*, AR. p. 228; *amicitātem* > E. *amity*, F. *amitié.*

-ā'lem occurs in AN. both as *-al* and *-el:* par *igal*, SD. 897, *communal*, PP. 722, are found by the side of *mortel*, Jos. 2007, *ostel*, Jos. 2067. Both terminations occur in ME.; but in MOD.E.—doubtless under the influence of the many words in *-al* belonging to the period of the revival of learning—the termination *-el* has been superseded by *-al*, although pronunciation could hardly distinguish between them.

-ā'ta is usually *-ee* or *-eie* in AN., the same in ME., and *-ey* or *-y* in MOD.E.: L. *diurnā'ta** > AN. *journee*, Jos. 292 > ME. *journeie*, AR. p. 352 > MOD.E. *journey;* similarly L. *gelā'ta* > E. *jelly; armā'ta* > E. *army; caminata* > E. *chimney.* To this class belongs *galley*, ME. *galeie*, KH. 185, 1020, OF. *galie*, which is generally supposed to go back to L. *galea*, although the termination seems to have caused trouble. Vid. Burguy, Grammaire de la Langue d'Oïl, III. p. 178. The OF. form *galie* might perhaps be considered as the contract feminine of the participle *galié* (comp. F. "faire chère *lie*" = *laeta*), standing thus for *navis galiata, galeata.*

Latin pretonic *a* is subject to weakening: *căballārium* > AN. *chevalier*, Jos. 279, PP. 1268 > ME. *chivalr(ie)*, King Alis. > MOD.E. *chivalry;* L. *căminā'ta* > E. *chimney; lăcerta* > E. *lizard; canī'le* > E. *kennel; salī're* > E. *sally.* In English this cannot of course be the case whenever the word becomes an oxytonon: L. *dilatā're* > E. *delay; tradī're* (for *tradē're*, for *trăddere*) > E. (*bē*)*tray*, etc.

Just as the Anglo-Norman shows a preference for *ei* over against the *oi* of the French proper, so it has a decided predilection for *ei* over against the French *ai*, from whatever source the last may come; *ai* occurs indeed, but the general tendency is decidedly

in favor of *ei*, which is then often contracted into *e*. The Middle English forms agree in the majority of cases with the Anglo-Norman.

feat. Lat. *factum* > AN. *feit, fet*, SD. 420 (F. *fait*) > ME. *feite, fete* > MOD.E. *feat*. Similarly: *factura* > AN. *feiture*, Jos. 29, SD. 353 > ME. *feture* > MOD.E. *feature*; **foris-factum* > AN. *forfet*, Jos. 467 > E. *forfeit*; also *counterfeit, surfeit, feasible*, etc.; over against which we have with the French diphthong *ai* only *affair*, which according to the D. E. Th. S. is spelt *affere* until Shakespeare's time.

plead. Lat. **placitare* > AN. *pleider, pleder*, Jos. 1003 > ME. *pleden*, Piers Plowm. > MOD.E. *plead*. OF. *plaider*.

lease. Lat. *lacsare* (*laxare*) > AN. *lesser*, Jos. 2514, PP. 1419 > ME. *lessen* > MOD.E. *lease*. Derivative: *lessor, lessee*. OF. *laissier*, etc.

treat. Lat. *tractare* > AN. *treiter, treter* > ME. *treten* > MOD.E. *treat*. Derivatives: AN. *tretiz*, PP. 12 > ME. *tretis* > MOD.E. *treatise*. Similarly, E. *treatment, treaty*. F. *traiter*.

peace. Lat. *pacs* (*pax*) > AN. *peis, pes*, Jos. 902 > ME. *peis*, AR. 22, 166, 172, etc. > MOD.E. *peace*. F. *paix*. Compound: ME. *apeisen, apesen* > MOD.E. *appease*. F. *apaiser*.

please. Lat. *placere* > AN. *pleisir*, PP. 267, 523 > ME. *plesen*, Piers Plowm. > MOD.E. *please*. F. *plaisir*. Verbal noun *pleasure*, ME. *plesure*, just as *leisure*, from *leisir*.

seize. OHG. *sazjan* (> LL. **sacire*) > AN. *seiser, sesir*, Jos. 2340 > ME. *seysen*, Havelock > MOD.E. *seize*. F. *saisir*. Derivatives: *seizure*, etc.; also *seizin*, a law term, ME. *seizine*.

eager. Lat. *acrem* > AN. *eigre, egre* > ME. *egre*, Chaucer > MOD.E. *eager*. F. *aigre*.

meager. Lat. *macrum* > AN. *megre*, Jos. 858 > ME. *megre*, Piers Plowm. > MOD.E. *meagre*. F. *maigre*.

heinous. AN. *heinus* > ME. *heinous, heinus*, Chaucer. OF. *haïnous*.

reason. Lat. *rationem* > AN. *resun*, SD. 230 > ME. *reisun, resun*, AR. 78, 112, 156, etc. > MOD.E. *reason*. F. *raison*.

season. Lat. *sationem* > AN. *sesun*, PP. 138 > ME. *seysun, sesoun*, etc., Chaucer > MOD.E. *season*. F. *saison*.

treason. Lat. *tra(d)itionem* > AN. *treisun, tresun* > ME. *treisun, tresun*, AR. 56, 220, etc. > MOD.E. *treason*.

orison. Lat. *orationem* > AN. *ureisun, uresun*, Jos. 1357, SD. 228 > ME. *oreisun, ureisun*, AR. pp. 16, 22, 36, etc. Doublet: Lat. *oration*, F. *oraison*. Similarly other nouns in *-ationem*: *comparison*, F. *comparaison*; *venison*, F. *venaison*, etc.

Those words which become oxytona in English usually preserve the original *ai* with the same sound as in *ray*:—

aid. Lat. *adjutare* > AN. *eider*, SD. 316 > ME. *aiden*, MOD.E. *aid.*

flail. Lat. *flagellum* > ME. *flail*, Piers Plowm.

frail. Lat. *fragilem* > ME. *frail, freel*, Chaucer. Similarly: *abbatia* > E. *abbey*; *badium* > *bay* (= brown); *bacca* > *bay* (laurel tree); *laicus* > *lay*; *radium* > *ray*, etc. The only exception seems to be *sagēna* > *seine* or *sean*, MF. *seine.*

This peculiarity of the Anglo-Norman of running Lat. *a* + *i* (F. *ai*) into *ei* and then contracting it into simple *e* accounts for the doublet *master* and *mister*, which seems to have given Mr. Skeat some trouble. He says: "It is difficult to trace the first use of *mister*, but it does not appear to be at all of early use, and is certainly nothing but a corruption of *master* or *maister*, due to the corresponding title of *mistress*." It seems to me that in this case Mr. Skeat should tell us how we get *mistress*, and why we do not say *mastress*. The explanation is not difficult. According to the rule stated above, *magistrum* has to become *maister* in Old French proper, but *meister* or *mester* in Anglo-Norman; and the latter form is found in Jos. 448, 1386, 2835, etc. The form *maister* does not occur in any of Chardry's poems. Besides *mester*, we have the abstract noun *mestrie* in Jos. 768, 2191, SD. 1224, etc. The Middle English form must then be *meister*, found in AR. pp. 56, 64, 182, etc., which in accordance with the above cited Anglo-Norman form may be contracted into *mester*, found in the abstract noun *mesterie*, AR. p. 108. To get from this ME. *mester* the MOD.E. *mister* is surely not difficult: we have precisely the same change in the case of Lat. *ministerium* > AN. *mester*, Jos. 302, 1827 > ME. *meister*, AR. pp. 70, 212, *mester*, Ib. pp. 72, 549 > MOD.E. *mister(y)*, *myster(y)*, (q. v. in Skeat, p. 386). By the side of the properly AN. form *mester* we find in later ME. — doubtless under French influence — *maister*, KH. 621, 642, etc.; and our conclusion is then that the MOD.E. *mister* is not only no "corruption," as Mr. Skeat calls it, but the regular AN. > ME. development of the word, while *master* is a rather "frenchified" form of it (comp. *cash* from F. *caisse*).

B. *Entravé* (*except before Nasals*).

Latin *a entravé* is usually preserved in French as well as in Norman and English, best of all before *r* + consonant: *partem* > *part*; *artem* > *art*. Similarly: *marble*, *alarm*, etc.; Lat. *damnaticum* >

damage; mansionem > *mansion*, etc. If not protected by surrounding consonants, the ME. *a* follows the usual mutation of pronunciation common to most English words; hence MOD.E. *āgent, nāture, chāste*, etc.

In a few words Lat. *a entravé* becomes *ai* in Old French and in Norman, and hence in English: *captivum* > OF. *caitif* > E. *caitiff; aquĭla* > F. *aigle* > ME. *egle*, Chaucer > MOD.E. *eagle*.

In Anglo-Norman Lat. *-al* before consonants becomes *-au*, just as in French, and many English words give evidence of it; e. g. Lat. *alburnum* > ME. *awburn, auburn*, Prompt. Parv. > MOD.E. *auburn; calciata* (sc. *via*) > ME. *cawsee, causee*, Barbour's Bruce > MOD.E. *causeway*, etc. In a few cases, however, we find double forms in ME.; e. g. Lat. *altare* > ME. *auter, alter* > MOD.E. *altar*, doubtless under Latin influence. There must also have existed in Anglo-Norman a tendency to drop the *l* before consonants entirely; e. g. *mut*, PP. 739, for *mult*, etc. This tendency produced such English words as *save* from *salvare*, F. *sauver; chafe* from *cal'fare** (for *calĕficare**), F. *chauffer*, etc.

C. *Before Nasals.*

Latin *a* before simple *n* becomes in French either *ai*, for instance, *manum* > *main, romanum* > *romain, nanum* > *nain*; or *e*, for instance, *christianum* > *chrétien, paganum* > *païen*, etc. In AN. *a* before *n* or *m* becomes *ei*; e. g. *plānum* > *plein*, Jos. 1266; *clamare* > *cleimer*, SD. 1119. In ME. we find as a rule *ei* as in AN., but in MOD.E. *ai* is usually written. Thus we have ME. *plein, pleyn, plain* > MOD.E. *plain;* ME. *vein, veyn*, Chaucer > MOD.E. *vain*. Similarly, MOD.E. *claim, exclaim, proclaim, grain*, etc. In unaccented syllables we sometimes find the old *ei* contracted into *e* and so written in MOD.E.: AN. *sudein*, PP. 1081 > ME. *sodein, sudein*, Chaucer > MOD.E. *sudden*, F. *soudain*. Similarly, MOD.E. *mittens*, F. *mitaine*, etc. But as a rule the French spelling prevails in English; e. g. *villain* (AN. *vilein*, SD. 186), *certain* (AN. *certein*, SD. 2, PP. 32, etc.), *fountain, chaplain, captain, chieftain* (AN. *chevetein*, SD. 1855), etc. Popular etymology has curiously changed the orthography of *foreign* and *sovereign*, making them appear as though they were connected with *reign* (Lat. *regnum*), while their true Latin types are *superanum** and *foranum**.

Before a fortified nasal (*n* or *m* + consonant) *a* must have had in Anglo-Norman a decidedly nasal pronunciation. This appears from its peculiar graphic representation by *-aun-* common with Anglo-

Norman and English writers, and preserved in some words up to the present time. This representation gives us a clue to the phonetic nature of the nasalization: *aun* must have been pronounced somewhat like the Portuguese *ão*, which is an *a* sound followed by a nasal, and not like the French *an*, which is an *a* sound itself nasalized. In later English the original sound gradually wore down to a simple long *a*, as in MOD.E. *vaunt;* but in most words even this pronunciation, and with it its peculiar graphic representation, had to give away to such sounds as we have in *change*, *chance*, etc. Oxytona show themselves of course more conservative than other words; hence we have still *aunt* (L. *amita*), *vaunt* (L. *vanitare*), *avaunt* (L. *ab-ante*), *haunt* (OF. *hanter*), *daunt* (OF. *danter*, L. *domitare*). Similarly, *haunch*, *launch*, *paunch*, *staunch*, etc. On the other hand, we have *grange*, *strange*, *ample*, *grant*, *chant*, etc., all of which are found in ME. with *aun*. The only non-oxytonon which has preserved the *aun* is *gauntlet;* all others have *an: giant*, *servant*, *tyrant*, *substance*, *advance*, *enhance*, etc., ME. *geaunt*, *servaunt*, *tiraunt*, *substaunce*, *avaunce*, *enhaunsen*, etc.

III. The Vowels o and u.

A. *Latin ō and ŭ* ("libres").

Latin *ō* and *ŭ* pass in Low Latin into one sound, generally denoted by *ȯ* (*o fermé*), and believed to have been the same as the French *o* in *côte*, *pot*, etc. If *libre*, this sound then passes in French proper into *eu*; e. g., L. *hōra* > F. *heure;* if *entravé*, it passes into *ou*; e. g., L. *currit* > *court*. The Norman shows in both cases a preference for *u*. In Middle English we have likewise *u* as a rule, but this soon passes into *ou* or *ow*. Hence we have:—

hour. Lat. *hōra* > AN. *ure*, PP. 548 > ME. *ure*, AR. pp. 6, 8, 20, etc., later *houre*, Chaucer > MOD.E. *hour*. F. *heure*.

flour, flower. Lat. *flōrem* > AN. *flur*, PP. 64, SD. 1554 > ME. *flur*, AR. p. 340, KH. 14 > MOD.E. *flower*. F. *fleur*.

crown. Lat. *corōna* > AN. *corune*, *curune* > ME. *crune*, Lay. 4252, etc., KH. 475, etc., AR. p. 40, etc.; *croune* only in Lay. Ms. *b* > MOD.E. *crown*. F. *couronne*.

spouse. Lat. *spōsus* (for *sponsus*) > AN. *espus(e)*, PP. 1183 > ME. *spus*, AR. pp. 2, 10, etc., *spus-bruche* = *adultery*, AR. 56 > MOD.E. *spouse*. Derivative v. ME. *spusen*, *i-spused*, KH. 1050, etc. > MOD.E. *to espouse*. F. *époux*, *épouser*.

Several suffixes with *ō'* are of importance: —

-ō'rem gives us regularly *ur* in AN.: *valur* SD. 429, *vigur* 939, *culur* 947, etc. In later AN. we find *our* and *or* by the side of *ur*; e. g. Vie de S. Gr. *amor* 327, *amour* 1741, *labor* 9, *colour* 705, etc., probably either under French or under Latin influence. In the earliest Modern English we find *ur*, e. g. *colur*, KH. 16; later also *our*, and under Latin influence *-or;* hence MOD.E. *valour* (*valor*), *honour* (*honor*), *vigor*, *conqueror*, etc; F. *valeur*, *honneur*, *rigueur*, etc.

-ō'sum is treated very similarly. AN. *-us: vigerus* PP. 576, *precius* Jos. 720, *mervillus* SD. 678, 1235, etc.; later *amorous* Vie de S. Gr. 86, *desirous* 122, *merveillouse* 639, *vigrous* 65, etc., and *pretioses* 219. ME. *-us: gracius*, AR. 366, etc.; later *-ous* as in MOD.E. *gracious*, *vicious*, *marvellous*, etc. F. *-eux: gracieux*, *merveilleux*, etc.

-ō'nem. AN. *passiun* SD. 372, 1717, *garisun* Jos. 270, *peissun* SD. 396, etc.; ME. *passiun* AR. 116, 188, etc., *devociun* 286, 368, *contemplaciun* 142; but MOD.E. *-on*.

In unaccented syllables *u* is also common in Anglo-Norman; e. g. *curage*, SD. 43, *cuardement*, 1031, *uresun*, 228, Jos. 1357, etc.; and the same is found in Middle English, but later the change of the English accent brings about differentiation; hence MOD.E. *courage*, *solemn*, *orison*, but *endow*, *coward*, etc. Modern English is here so whimsical that it is absolutely impossible to formulate any rule; e. g. *ŏdō'rem* > *odour*, *cŏlō'rem* > *colour*, etc.

B. *Entravés* (*except before Nasals*).

Latin *o entravé* is usually preserved in French as well as in Norman; hence L. *cotta* > E. *coat;* L. *costa* > E. *coast;* L. *tosta* > E. *toast;* L. *concha* > E. *coach;* L. *appropiare** > E. *approach;* L. *repropiare* > E. *reproach*, etc. All of these are spelled with simple *o* in Middle English.

Latin *u entravé* generally becomes *o* in Old French, and later *ou;* e. g. L. *turrem* > OF. *tor*, later *tour*, MF. *tour*. The Norman, having a predilection for *u*, retains it, of course, and as such it passes into Middle English, where it later follows the regular mutation to *ou;* e. g. AN. *tur*, Jos. 261 > ME. *tur*, Lay. *a*, *b*, I. 258, AR. p. 226, KH. 1103 > MOD.E. *tower;* L. *dubitare* > AN. *duter*, SD. 950 > ME. *duten*, AR. 244, KH. 344; L. *gutta* > E. *gout*, etc. Before *r*, however, this change to the *ou* pronunciation does not take place, although

it is sometimes written: L. *diurnā'ta* > E. *journey;* L. *incurrere* > E. *incur;* L. *nutricem* > E. *nurse;* L. *cohortem* > E. *court* (AN. *curt*, DS. 223, ME. *curt, kurt*, AR. 210, 212, etc., KH. 245).

C. *Latin* ŏ, *tonic.*

Latin *ŏ* in the tonic syllable is regularly diphthongized to *oe* in Anglo-Norman; e. g. *quoer, foer, hoem, proeve, moert, voelent*, etc. This *oe* must be supposed to represent some kind of an *o umlaut*. In Middle English it is at first represented by an *e* or *ee*, sometimes *oe*, which is then subject to the regular mutation of pronunciation; hence, ME. *retreven* > MOD.E. *retrieve*, and in two words at least, viz. *choir* and *contrive*, the mutation has gone one step further yet. The words belonging to this class are: —

beef. Lat. *bŏvem* > N. *boef*, Kelham > ME. *beef*, Chaucer. F. *bœuf.*

people. Lat. *pŏpulum* > N. *poeple* > ME. *peple, poeple*, Piers Plowm. > MOD.E. *people.* F. *peuple.* (Comp. the Rhaetian *pievel.*)

jeopardy. Lat. *jŏcum-partitum* > ME. *jeopardy, jepardy, jopardy, jupartie*, etc., Chaucer. Possibly at various times confounded with *jeu perdu* and *j'ai perdu.*

affeer. Lat. *ad* + *fŏrum* > AN. *afeoren*, Kelham > ME. *aferen* > MOD.E. *affeer*, preserved in legal language = to reduce or assess, as an arbitrary penalty or amercement, to a precise sum; to reduce to a sum certain, according to the circumstances of the case. Blackstone. MF. "au *fur* et à mesure."

proof, prove. Lat. *prŏbā're* > AN. *pruver*, SD. 1250, but as tonic syllable, 3d pers. plur. *proevent*, SD. 1394 > ME. *preoven, preven*, AR. p. 390, Piers Plowm. In Modern English the vowel has been changed under Latin influence, but it is preserved in the compound *reprieve*, ME. *repreven*, a doublet of *reprove.*

retrieve. AN. *truver*, SD. 1269, but accented *troē've*, SD. 1857 > ME. *(re)treven* > MOD.E. *retrieve.* Similarly, we should have *contrieve*, but for some unknown reason the vowel has here shifted once more to *contrive*, just as in

choir. Lat. *chŏrus;* it should be *queer*, which form is actually found in Barbour's Bruce, xx. 293, and in the Prompt. Parv. p. 420, *queere* = *chorus.*

move. Lat. *mŏvē're* > ME. *moeven, meven*, Piers Plowm. and Chaucer, changed through Latin or French influence to MOD.E. *move.* Similarly, ME. *remeven, ameven.*

This treatment of Latin *ŏ* in Anglo-Norman and Middle English,

illustrated by the above examples, will clear up the etymology of *inveigle*, which Mr. Skeat considers doubtful. He would like to take it from *in-ab-ocul-are**, which indeed looks reasonable enough, but he objects to this etymology on account of the "spelling." English orthography is of course altogether below scientific criticism; hence it must be the pronunciation, and particularly that of the tonic syllable, which gives the trouble. Mr. Skeat cannot account for the *ī* (Continental) sound arising from a Latin *o*. The matter is easy enough: Latin *ŏ* gives us, according to the rule cited above, *oe* or *eo* in Anglo-Norman; hence the form *enveogler* cited in Kelham's Norman Glossary; *enveogler* gives us the ME. *enveglen*, which then takes part in the regular mutation of vowel sounds, *ei* being chosen to represent the *ī* sound. This matter of spelling is indeed non-essential, for in Richardson's Dictionary we find a number of other spellings of this same word, but all representing the same sound, which is the essential point.

D. *Latin* ū, *tonic.*

Latin *ū* in accented syllables is preserved in French as a *u umlaut*. In Norman it is always *u*, but its Modern English pronunciation shows that even in Norman it must have partaken of the *umlaut sound*. We have L. *pūrum* > E. *pure*; L. *mūtum* > E. *mute*; L. *ūsum* > E. *use*; L. **adventura* > E. *adventure*, etc.

As a pretonic we have it in L. *glūtīre* > E. *glut*, which has doubtless been influenced by *glutton*.

E. *Latin o, u + i, or palatal.*

In French a Latin *o* unites with a following *i* or a palatalized guttural to form *oi*, and this is later changed to *ui*; e.g. *noctem* > *noit* > *nuit*; *oleum* > *oile* > *huile*, etc. On the other hand, *u* under the same circumstances becomes *oi*, and does not change again; e.g. *fusionem* > *foison*. In Anglo-Norman the same process takes place, except that the *oi* never changes to *ui*; thus *oi* is also the rule for Middle English, and likewise for Modern English. Hence L. *jungere* > E. *join*, F. *joindre*; L. *junctum* > E. *joint*; *punctum* > *point*; *fusionem* > *foison*, etc.; L. *oleum* > E. *oil*, F. *huile*; L. *molliare** > E. *moil*, F. *mouiller*; *spoliare* > *spoil*, F. (*de*)*pouiller*; L. *inodiare** > E. *annoy*, F. *ennuyer*, etc.

F. *Before Nasals.*

Before nasals Latin *o* is retained in French; e. g. *nomen* > *nom*, *montem* > *mont*; Lat. *u* becomes *o* before a fortified nasal; e. g. *fundum* > *fond*, *abundare* > *abonder*. In Norman we have in both cases *u*, likewise in the early Middle English, later in the accented syllables *ou*. Hence L. *nomen* > AN. *nun*, SD. 208 > ME. *nun*, *num* > MOD.E. *noun*; L. *otundum* > AN. *rund*, PP. 1334 > ME. *rund*, *round*, MOD.E. *round*. Similarly: L. *montem* > E. *mount*; L. *comitem* > E. *count*; L. *computare* > E. *count*; L. *fundere* > E. *found*; L. *componĕre* > E. *compound*; L. *consilium* > E. *counsel*; L. *adnuntiare* > E. *announce*, *renounce*, *pronounce*, but in the unaccented syllable of course *-nunciation*, etc. In French we have simple *o*; e. g. *rond*, *nom*, *mont*, *conter*, *prononcer*, etc.

Conclusion.

It will be seen that in a general way the phonology of the Norman words in English can be traced back to that of the Anglo-Norman dialect. Irregularities are mostly due to the influence which was exercised by Romance words introduced at other times, and belonging to other stages of linguistic development.

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SD. Set Dormanz } Förster's Altfranzösische Bibliothek, Vol. I., Heilbronn,
PP. Petit Plet } Henninger, 1879.

Vie de S. Gr. — La Vie de S. Grégoire, par Frère Angier (beginning of the thirteenth century), edited by P. Meyer, Romania, xii. p. 145.

MIDDLE-ENGLISH TEXTS.

Lay. Layamon's Brut. ed. F. Madden, London, 1847, 3 vols.
Text *a*, about A. D. 1205.
Text *b*, about A. D. 1255.

AR. The Ancren Riwle, ed. Morton: about A. D. 1200.

KH. The Romance of King Horn in Morris's Specimens: about A. D. 1300.

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VI. — *The Ablaut in High German.*

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There is hardly a modern language which presents so faithful a picture of its former state as the German. Both consonants and vowels are preserved with infrequent, and in great part unimportant changes, and both the inflexional and ablaut systems have suffered less than in the older Germanic dialects. The article, the adjective, the pronoun, and the noun retain their earlier declension with few alterations; the verb has preserved many of its personal endings; and the ablaut, which has survived in barely a quarter of the Old English verbs, and even in these with such irregularities as to make the study fruitless, except from an historical point of view, is found in German in one half the older verbs, and with a fulness and a regularity in its formation that are hardly paralleled.

In a study of the strong verbs, what questions present themselves to be solved, and how should our work be divided? We must first classify them. This has been sufficiently spoken of in previous papers. Within each class the growth and decay of the ablaut must be shown during the

three periods which make up historical High German, — the old, the middle, and the new periods; the first extending up to about 1100, the second to 1500, and the third to our own day. Here, however, a difficulty presents itself; for in OHG. almost every document has a different system of spelling, and the MHG. is by no means uniform, even in the same district and century. It would be impossible in the limits of this essay to give every form, and therefore the normal and usual forms have as a rule alone been given, though others have been noticed wherever they possessed any historic value. This analysis of the ablaut is accompanied by complete lists of all verbs belonging to it at each stage of the language. But the study of these lists suggests several other questions. Whence come the additions that appear first in MHG., and even in NHG.? The history of these intruders must be examined, and their source discovered. And we find also many that have become wholly or partially weak. We ask ourselves when and why these verbs became so; and when this question is disposed of, there remains the long list of verbs that have fallen from the ranks in MHG. and NHG., and we ask when and why they were discarded.

Such is the scope of this study. Tabulated results have been added, and summarize the scattered details. Frequent comparisons with the history of the English ablaut, taken from my paper in the Transactions of 1882, will show some interesting results for the comparative grammar of these languages.

SECTION I. — THE STRONG VERBS.

Class I. a.

The Old Germanic ablaut was *e, a, ā, e;* and this remained unchanged in OHG., though this class, which originally comprised all verbs whose stems contained *a* followed by a mute, has in OHG. suffered considerable loss to Class I. b., where the past participle is with the vowel *o*. This change embraces all stems ending in *hh* (*brehhan, rehhan, sprehhan, stehhan, trehhan, swehhan*), and *trefan;* but *swehhan* has occasionally

a participle in *e*. These verbs therefore appear under I. b. This change from I. a. to I. b. goes still further in MHG., occurring sometimes in *lesen, kneten, pflegen, stechen, wegen, weben,* and always in *rechen, schrecken,* which two are therefore listed under I. b. NHG. adds to the list *weben, wegen,* and *gären,* while *pflegen* vacillates between I. a. and I. b.

Grammatic change of *s* to *r*, *d* to *t*, and *h* to *g*, occurs after the third and fourth ablaut vowels regularly in OHG. In MHG. it is less common, and in NHG. survives only in the deflective *war* : *gewesen*, and in *gären*, where it has got into the present also.

The present vowel *e* becomes *i* in OHG. in the *ja* stems (*bittan, liggan, sizzan*), which is retained in MHG. and in NHG. (*bitten, liegen, sitzen*). *E* is also changed to *i* in the indic. sing. present (*sihu, sihst, siht,* from *sehan*). This change becomes irregular in MHG., and is now confined to the 2d and 3d pers. sing. of verbs with the ablaut *e, a, e,* while those with *e, o, o* have no change. In NHG., however, the *i* becomes *ie* before sonants, e. g. *liest, geschieht, giebt, liegt.*

In MHG. the regular ablaut undergoes no change. The passing of verbs to I. b. has been noted above. Isolated peculiarities are *ō* for *ue*, and *ū* for *ui*, in OHG. *quedan* (*kōden, kūde*), and *wuog* for *wag*, as a past to *wegan*, by the analogy of Class IV.

In NHG. the regular ablaut is *e, a, e.* The *a* of the singular finds its way into the plural. Four verbs have forms like I. b., *e, o, o; weben, bewegen, pflegen, gären.* Of these *pflegen* is sometimes weak, and has sometimes *e, a, e; wegen* appears also as *wägen* and *wiegen*, and *gären* is often weak. The *ä* for *e* is due to the *r;* see I. b. *bären* or *bähren.*

The verbs belonging to this class are: —

OHG.	MHG.	NHG.
bittan, *bid*	bitten	bitten
	brehen, *shine*	
ezzan (frezzan), *eat*	ezzen	essen
fehan, *rejoice*		
geban, *give*	geben	geben
gezzan, *get*	gezzen	ver-gessen
jehan, *say*	jehan, s. and w.	

OHG.	MHG.	NHG.
jesan, *ferment*	jesan, geren	gären, gähren, *o, o,* and w.
jetan, *weed*	jeten	gäten, w.
knetan, *knead*	kneten	kneten, w.
lechan, *lick*	lechen	lechen, w.
kresan, *creep*	kresen	
lesan, *read, pick*	lesen	lesen
liggan, *lie*	liggen	liegen
mezzan, *mete*	mezzen	messen
nesan, *recover*	nesen	ge-nesen
pflegan, *care for*	pflegen, s. and w.	pflegen, *a, e; o, o;* and w.
quedan, *speak*	queden, kōden	
redan, *sift*	reden	
	regen, *rise*	
scehan, *happen*	schehen, s. and w.	ge-schehen
sehan, *see*	sehen	sehen
sizzan, *sit*	sizzen	sitzen
stredan, *glow*	streden	
swedan, *burn*		
tretan, *step*	treten	treten
weban, *weave*	weben	weben, *o, o*
wegan, *move*	wegen	be-wegen, wägen, wiegen; *o, o,* and w.
wesan, *be*	wesen	* wesen, war, gewesen
wetan, *bind*	weten	

SUMMARY.—Strong in OHG., 28; MHG., 28; NHG., 17. Weakened in MHG., always none, sometimes 3; in NHG., always 3, sometimes 3. Absent from OHG., 2; MHG., 2; NHG., 10. Total number of stems, 30.

Class I. b.

The Old Germanic ablaut was *e, a, ā, o.* Originally confined to stems with *a* followed by *l, m, n, r,* this class contained many additions from I. a. in OHG., and still more in MHG., as well as some from I. c.; the *ā* taking the place of *u* always in *dehsen* and *lesken,* which are therefore listed here, and often in *bresten, flechten, fechten. Vice versa,* we have *e* for the regular *o* in the past participles of *stemen, zemen,* but not regularly. See Class I. a. and I. c.

In MHG the ablaut is preserved intact.

In NHG. the regular ablaut is *e, a, o; e, o, o* occurs in *scheren, rächen.* Before, and sometimes after *r, ä* is used for *e,* as in *gären* I. a.; e.g. *bären.* The *ö* for *e* in *löschen* and *schwören*

is irregular and unexplained. The *ue* in *queman* becomes *o* usually in MHG., and always in NHG. Two verbs of Class IV. have come to have the ablaut *e, o, o* in NHG., *heben* and *schwören*. We find, however, the older pasts *hub, schwur,* and also the adj. *erhaben*.

The verbs belonging to this class are: —

OHG.	MHG.	NHG.
beran, *bear*	beren	bären, bähren
brehhan, *break*	brehhen	brechen
breman, *hum*	bremen	
	dehsen, *beat*	
dweran, *twirl*	dweren	
helan, *conceal*	helen	ver-hehlen, w.
leskan, *extinguish*	leschen	löschen, *o, o,* and w.
neman, *take*	nemen	nehmen
quelan, *kill*	quelen	quälen, w.
queman, koman, *come*	komen, s. and w.	kommen
	rechen, *gather*	
rehhan, *avenge*	rehhen	rächen, *o, o,* and w.
sceran, *cut*	scheren	scheren, *o, o*
	schrecken, *frighten*	schrecken
sprehhan, *speak*	sprehhen	sprechen
stehhan, *prick*	stehhen	stechen
	stemen, *hinder*	
stelan, *steal*	stelen	stelen, stehlen
sweran, *hurt*	sweren	schwären, -schweren, w.
swehhan, *gush*	swehhen	
trehhan, *push*	trehhen	
trefan, *meet*	trefen	treffen
	tremen, *endure*	
twelan, *be stiff*	twelen	
zeman, *befit*	zemen	
zeran, *tear*	zeren	zären, -zehren, w.

SUMMARY.— Strong in OHG., 21; in MHG., 26; in NHG., 12. Weakened in MHG., always none, sometimes 1; in NHG., always 4, sometimes 2. Absent from OHG., 5; from MHG., none; from NHG., 10. Total number of stems, 26.

Class I. c.

In old Germanic the ablaut was *e, a, u, o*. In OHG. this remains, except before nasals, where it becomes *e, a, u, u*. In the indic. sing. present *e* becomes *i* in OHG.; this becomes

irregular in MHG., and in NHG. is confined to 2d and 3d persons; e. g. *wird*, O. M. NHG. 3d. sing. of *werden*.

MHG. loses a few verbs from this class to I. b.; which see. Here also the *a* and *o* sometimes become *u*. In NHG. *a* occasionally appears as *u*, but *o* never does.

In NHG. the regular *ablaut* is *e, a, o*, or *e, o, o*, except before nasals. Before *n* + mute, the ablaut is *i, a, u;* before *nn, i, a, o;* before *mm, i, o, o;* and in *schwimmen*, usually *i, a, o*. *Werden* alone has preserved the original four vowels; *u* is regular in the past plural and subjunctive (as *ü*), and sometimes in the past singular, *werden, ward* (*wurde*), *wurden, worden*. Occasionally *u* appears for *a* in the singular indic., and oftener as *ü* in the subjunctive; examples are *dung, rung, schund, schwund, stunk, trunk, klünge*. In the verbs with *e, a, o*, we find *ö* sometimes in the past subjunctive, e.g. *böre, gölte, schölte;* and sometimes *ü*, e.g. *bürge, hülfe, stürbe, verdürbe*. In verbs with *i, a, o*, we find *ö* in the subj. in *begönne, gewönne, rönne, sönne, spönne*. Isolated is the present *schallen* strong and weak, for **schellen;* this form is from a MHG. weak *schallen*, but the remainder of the verb is the old strong one.

With *e, a, o: bersten, bergen, verderben, dreschen, fehlen, gelten, helfen, schelten, sterben, werben, werden, werfen* (12).

With *e, o, o: flehten, flechten, melken, quellen, schallen, schmelzen, schwellen* (7).

With *i, a, o: beginnen, rinnen, sinnen, spinnen, schwimmen, winnen* (6).

With *i, o, o: glimmen, klimmen;* rarely *schwimmen* (2).

With *i, a, u: binden, dingen, dringen, finden, klingen, gelingen, ringen, singen, sinken, slingen, springen, stinken, schwinden, schwingen, trinken, winden, zwingen* (17).

With *i, u, u: schinden*, and rarely *schwinden, ringen, dingen* (1).

The verbs belonging to this class are: —

OHG.	MHG.	NHG.
belgan, *swell*	belgen	
bellan, *bell*	bellen	bellen, w.
berstan, *burst*	bersten, bresten	bersten, *a, o*, and w.

OHG.	MHG.	NHG.
bergan, *hide*	bergen	bergen, *a, o*
bindan, *bind*	binden	binden, *a, u*
brettan, *bind*	bretten	
	brimmen, *hum*	
brinnan, *burn*	brinnen	
	delhen, *delve*	
	derben, *spoil*	ver-derben, *a, o,* and W.
	dimpfen, *smoke*	
		dingen, *a, u ; u, u ;* and W., [*hire.*
dinsan, *pull*	dinsen	
	drellen, *turn*	
drescan, *thresh*	dreschen	dreschen, *a, o,* and W.
	drinden, *swell*	
dringan, *push*	dringen	dringen, *a, u*
dwingan, *compel*	twingen	zwingen, *a, u*
fehtan, *fight*	fehten	fechten, *o, o*
flehtan, *braid*	flehten	flechten, *o, o*
felhan, *conceal*	felhen S. and W.	fehlen, W., empfehlen, *a, o*
ferzan, L. *pedere*	ferzen	ferzen, W.
findan, *find*	finden	finden, *a, u*
	gelfen, *boast*	
gellan, *yell*	gellen	
geltan, *be worth*	gelten	gelten, *a, o*
ginnan, *begin*	ginnen	be-ginnen, *a, o*
	glimmen, *glimmer*	glimmen, *o, o* and W.
helfan, *help*	helfen	helfen, *a, o*
hellan, *sound*	hellen	
hinkan, *limp*	hinken	hinken, W.
hrespan, *pluck*		
kerran, *cry*	kerren	
klimman, *climb*	klimmen	klimmen, *o, o,* and W.
	klimpfen, *squeeze*	
klingan, *clink*	klingen	klingen, *a, u,* and W.
klinnan, *smear*		
	knellen, *ring*	
krimman, *press*	grimmen, grinnen	
krimpfan, *crumple*	krimpfen	
limman, *snarl*	limmen	
limpfan, *befit*	limpfen	
lingan, *attain*	lingen	gelingen, *a, u*
linnan, *yield*		
melkan, *milk*	melken	melken, *o, o,* and W.
nindan, *dare*		
quellan, *gush*	quellen	quellen, *o, o,* and W.
rimpfan, *wrinkle*	rimpfen	
ringan, *fight*	ringen	ringen, *a, u,* and *u, u*
rinnan (trinnan), *run*	rinnen	rinnen, *a, o*
scellan, *sound*	schellen	schallen, *a, o,* and W.

OHG.	MHG.	NHG.
sceltan, *scold*	schelten	schelten, *a*, *o*
scerran, *scratch*	scherren	
	schinden, s. and w., *skin*	schinden, *u*, *u*
scrindan, *crack*	schrinden	
	selken, *drip*	
singan, *sing*	singen	singen, *a*, *u*
sinkan, *sink*	sinken	sinken, *a*, *u*
sinnan, *think*	sinnen, s. and w.	sinnen, *a*, *o*
slindan, *devour*	slinden	= *schlingen*
smelzan, *melt*	smelzen	schmelzen, *o*, *o*, and w.
slingan, *devour*	slingen	schlingen, *a*, *u*
spinnan, *spin*	spinnen	spinnen, *a*, *o*
smerzan, *hurt*	smerzen, s. and w.	schmerzen, w.
springan, *spring*	springen	springen, *a*, *u*
snerfan, *pull together*	snerfen	
snerhan, *tie*	snerhen	
sterban, *die*	sterben	sterben, *a*, *o*
	sterzen, *project*	
stinkan, *stink*	stinken	stinken, *a*, *u*
swelhan, *swallow*	swelhen	schwelgen, w.
swellan, *swell*	swellen	schwellen, *o*, *o*, and w.
swelzan, *be consumed*	swelzen	
swerban, *hover*	swerben	
swimman, *swim*	swimmen	schwimmen, *a*, *o*
swindan, *vanish*	swinden	schwinden, *a*, *u*, and *u*, *u*
swingan, *swing*	swingen	schwingen, *a*, *u*
telban, *dig*	telben	
trinkan, *drink*	trinken	trinken, *a*, *u*
wellan, *roll*	wellen	
werban, *obtain*	werben	werben, *a*, *o*
werdan, *become*	werden	werden, *a*, *u*, *o*
werfan, *throw*	werfen	werfen, *a*, *o*
werran, *confuse*	werren	wirren, w.
windan, *wind*	winden	winden, *a*, *u*
winkan, *wink*	winken	winken, w.
winnan, *win*	winnen	ge-winnen, *a*, *o*

SUMMARY.—Strong in OHG., 73; MHG., 82; NHG., 45. Weakened in MHG., always none, sometimes 4; in NHG., always 7, sometimes 13. Absent from OHG., 14; from MHG., 5; from NHG., 35. Total number of stems, 87.

Class II.

The Old Germanic ablaut was *ei*, *ai*, *i*, *i*, which in OHG. became *ī*, *ei*, *i*, *i*; and, before *h*, *ī*, *ē*, *i*, *i*.

In OHG. grammatic change substituted *t* for *d*, *r* for *s*, and

g for *h*, after the third and fourth ablaut vowels. In MHG. this change was also regular; but in NHG. it occurs only in *leiden, schneiden.*

In MHG. the ablaut is unaltered; *e* occurs sometimes for *i*, and *ei* for *ē*. In stems ending in a vowel or *w*, *scrīen*, *spīwen*, *glīen*, and in *līhen* (Gothic *leihvan*), we have *ei* or *ē* in the past sing.; and in the plural, for *iw*, either *iuw* or *ūw*; thus, *schriwen*, *schriuwen*, *schrūwen*; *spūen*, *lūwen*, are not uncommon forms. Occasionally we find *r* for *w*, as for instance in *spirn*, *schirn*, especially in Bavaria. Gradually the *e* of the past plural and participle begins to appear in the singular also. The earliest example is in Schonebek, Das Hohe Lied, which is dated by Weinhold A. D. 1276.

In NHG. the ablaut is *ei*, *i*, *i*, before surds, and *ei*, *ie*, *ie*, before sonants. This change of *i* to *ie* before sonants occurs also in I. a. in 2d and 3d singular pres. indic. *Leiden*, *schneiden*, have *i*, *i*, owing to the change of *d* to *t* in the past and participle.

With *ei*, *i*, *i*: *beissen*, *bleichen*, *befleissen*, *gleichen*, *gleiten*, *greifen*, *keifen*, *kneifen*, *kneipen*, *leiden*, *pfeifen*, *reissen*, *reiten*, *scheissen*, *schleichen*, *schleifen*, *schleissen*, *schmeissen*, *schneiden*, *schreiten*, *spleissen*, *streichen*, *streiten*, *weichen* (24). Final consonants, *ch*, *f*, *p*, *ss*, *t*, and *d* = *t*.

With *ei*, *ie*, *ie*: *bleiben*, *gedeihen*, *leihen*, *meiden*, *preisen*, *reiben*, *scheiden*, *scheinen*, *schreiben*, *schreien*, *schweigen*, *speien*, *steigen*, *treiben*, *weisen*, *zeihen* (16). Final consonants, *b*, *d*, *g*, *h*, *n*, *s*, and final vowel.

The verbs belonging to this class are:—

OHG.	MHG.	NHG.
bītan, *bite*	bīten, s. and w.	
bīzan, *bite*	bīzen	beissen, *i*, *i*
blīcan, *pale*	blīchen	bleichen, *i*, *i*, and w.
	brīsen, *tie*	
	brīten, *weave*	
dīhan, *flourish*	dīhen	ge-deihen, *ie*, *ie*
flīzan, *be zealous*	flīzen, s. and w.	be-fleissen, *i*, *i*
	glīfen, *slant*	
	glīen, *cry*	
	glīten, *slip*	gleiten, *i*, *i*, and w.
glīzan, *glisten*	glīzen	gleissen, w.
gnītan, *rub*		
grīfan, *gripe*	grīfen	greifen, *i*, *i*

OHG.	MHG.	NHG.
grīnan, *grin*	grīnen	greinen, w.
		keifen, *i, i,* and w., *chide*
kīnan, *bud*	kīnen, chīnen	
kiiban, *cling*	chlīben	
		kneifen, *i, i,* and w., *nip*
		kneipen, *i, i,* and w., *nip*
	krīgen, s. and w., *get*	kriegen, w.
līban, *leave*	līben	b-leiben, *ie, ie*
līdan, *suffer*	līden	leiden, litt, litten
līhan, *lend*	līhen	leihen, *ie, ie*
	lichen, s. and w., *be like*	g-leichen, *i, i,* and w.
	līmen, *snare*	
mīdan, *avoid*	mīden	meiden, *ie, ie*
	nīden, s. and w., *envy*	be-neiden, w.
nīgan, *bend*	nīgen	neigen, w.
pīifan, *pipe*	pfīfen, s. and w.	pfeifen, *i, i*
		preisen, *ie, ie, praise*
rīban, *rub*	rīben	reiben, *ie, ie*
rīdan, *twist*	rīden	
rīhhan, *rule*		
rīhan, *set in order*	rīhen	
rīnan, *touch*		
rīsan, *rise*	rīsen	
rītan, *ride*	rīten	reiten, *i, i*
rizan, *tear*	rīzen	reissen, *i, i*
scīnan, *shine*	schīnen	scheinen, *ie, ie*
scizan, L. *cacare*	schīzen	scheissen, *i, i*
scrīban, *write*	schrīben	schreiben, *ie, ie*
scrīan, *cry*	schrīen, s. and w.	schreien, *ie, ie*
scrītan, *stride*	schrīten	schreiten, *i, i*
sīgan, *sag*	sīgen	
sīhan, *sift*	sīhen	
	schīben, *roll*	
	schīden, *divide*	scheiden, *ie, ie,* and w.
	schīten, s. and w., *split*	
slīcan, *crawl*	slīchen	schleichen, *i, i*
slīfan, *drag*	slīfen	schleifen, *i, i,* and w.
slītan, *slide*	slīten	
slīzan, *slit*	slīzen	schleissen, *i, i*
smīzan, *smite*	smīzen	schmeissen, *i, i*
snīdan, *cut*	snīden	schneiden, *ie, ie*
spiwan, *spew*	spīwen, s. and w.	speien, *ie, ie,* and w.
	splīzen, *split*	spleissen, *i, i,* and w.
	sprīten, *bend*	
sprīzan, *split*		
stīgan, *mount*	stīgen	steigen, *ie, ie*
strīhhan, *stroke*	strīchen	streichen, *i, i*
strītan, *quarrel*	strīten	streiten, *i, i*

OHG.	MHG.	NHG.
	swīfen, *rove*	schweifen, w.
	swīgen, s. and w., *be still*	schweigen, *ie, ie*
swīhhan, *deceive*	swīchen	
swīnan, *vanish*	swīnen	
	tīchen, *try*	
tīban, *drive*	trīben	treiben, *ie, ie*
wīhhan, *yield*	wīchen	weichen, *i, i*
wīfan, *wind*	wīfen	
wīhan, *fight*	wīhen, s. and w.	
wīzan, *show*	wīzen	weisen, *ie, ie*
zīhan, *accuse*	zīhen, s. and w.	zeihen, *ie, ie*

SUMMARY.—Strong OHG., 51; MHG., 64; NHG., 40. Strong and weak in MHG., 12, always weak, none; in NHG., always 6, sometimes 11. Absent from OHG., 21; from MHG., 8; from NHG., 26. Total number of stems, 72.

Class III.

In Old Germanic the ablaut was *eu, au, u, u,* which in OHG. becomes regularly *io, ou, u, o;* but before *w,* and always in the indic. sing. present, we have *iu* for *io.* A few verbs had *ū* for *eu* in Old Germanic; these retain *ū* in OHG. See Schmidt, Vocalismus, I. 140 ff. In the past, *ō* occurs for *ou* before the dentals *t, s, z,* and *h.* The third vowel, *u,* is retained, but in the participle *u* becomes *o.*

In MHG. *io* becomes *ie; iu* and *ū* remain, though in MG. we find *ū* sometimes for *iu.* Gradually *ie* takes the place of *iu,* especially in the first person sing. In the past, MHG. sometimes uses *ou* for *ō* before *h,* but usually keeps the OHG. forms. In late MHG. *o* appears in the singular, coming from MG., where *o* is regular in the plural. The oldest example is in Jeroshin, A. D. 1340. In the past plural, *u* is usually retained, but before *w* we find *ū, iu, ou;* e. g. from *fliohan* we find *flūwen, flouwen, flūn.* Compare the effect of *w* in Class II. In MG. *o* regularly takes the place of *u,* and this appears in late MHG., and is now regular. From the plural *o* made its way into the singular, especially in verbs which had *ō* in the singular, and this *ō* appears also in the plural. The participle in MHG. is always *o* except before *w,* where *u, ō, iu, ou* occur.

In NHG. the ablaut is *ie, o, o.* For *ū* we have *au,* and in

2nd and 3d pres. ind. sing. *eu* for OHG. *iu* occurs rarely. Two verbs have *ü* in the present (*lügen*, *küren*), perhaps by metathesis of *iu* to *ui* = *ü*.

Grammatic change of *d* to *t*, *h* to *g*, and *s* to *r*, is regular after the third and fourth ablaut vowels in OHG. and MHG. In NHG. this is confined to *sieden* : *sott*; *ziehen* : *zog*. *Fliehen* : *floh*, *kiesen* : *kos*, retain the present consonants, while *küren* : *kor*, *frieren* : *fror*, *verlieren* : *verlor*, bring the *r* into the present also.

The verbs belonging to this class are: —

OHG.	MHG.	NHG.
biogan, *bow*	biegen	biegen
biotan, *offer*	bieten	bieten
bliuwan, *blow*	bliuwen	bläuen, w.
	briezen, *burst out*	
briuwan, *brew*	briuwen, s. and w.	brauen, w.
diozan, *roar*	diezen	
driozan, *annoy*	driezen	ver-driessen
fliogan, *flee*	fliegen	fliegen
fliohan, *fly*	fliehen	fliehen
fliozan, *flow*	fliezen	fliessen
friozan, *freeze*	friezen	frieren
giozan, *pour*	giezen	giessen
hliozan, *cast lots*	liezen	
hniotan, *fasten*		
kiosan, *choose*	kiesen	kiesen, küren, s. and w.
kiuwan, *chew*	kiuwen, s. and w.	kauen, w.
klioban, *cleave*	klieben	klieben
kriochan, *creep*	kriechen	kriechen
liogan, *lie*	liegen	lügen
liosan, *lose*	liesen	ver-lieren
liotan, *grow*		
lūhhan, s. and w., *lock*	lūhhen	
niosan, *sneeze*	niesen	niesen, w.
niozan, *enjoy*	niezen	ge-niessen
niuwan, *renew*	niuwen	
riohhan, *smell*	riechen	riechen, s. and w.
riozan, *drip*	riezen	
riuwan, *repent*	riuwen	reuen, w.
scioban, *shove*	schieben	schieben
sciozan, *shoot*	schiezen	schiessen
		schrauben, s. and w., *screw*
siodan, *seethe*	sieden	sieden, s. and w.
sliofan, *glide*	sliefen	schliefen
sliozan, *shut*	sliezen	schliessen
	smiegen, *bend*	schmiegen, w.

OHG.	MHG.	NHG.
	spriezen, *sprout*	spriessen
	snūfen, *snort*	schnaufen, schnauben, s. [and w.
stioban, *fly about*	stieben	stieben
sūfan, *drink*	sūfen	saufen
sūgan, *suck*	sūgen	saugen, s. and w.
triogan, *betray*	triegen	betriegen, s., betrügen, w.
triofan, *drip*	triefen	triefen, s. and w.
ziohan, *draw*	ziehen	ziehen

SUMMARY. — Strong in OHG., 38; in MHG., 40; in NHG., 29. Weakened in MHG., always none, sometimes 2; in NHG., always 6, sometimes 8. Absent from OHG., 5; from MHG., 3; from NHG., 8. Total number of stems, 43.

Class IV.

In Old Germanic the ablaut was *a, ō, ō, a,* which in OHG. became *a, uo, uo, a.* Verbs that had *ja-* stems take umlaut of *a* to *e* in the present in late OHG. and MHG., which change usually occurs also in 2d and 3d pres. indic. sing. of all verbs of this class; in NHG. this is written *ä* (*fährt, mählt,* &c.).

MHG. keeps the ablaut unchanged; MG. has *ū* and *ō* for *uo.* Occasionally we find irregular pasts of this class in verbs of other classes; thus *swuor, swūr,* from *swern,* I. b.; *wuoc, wūc,* from *wegen,* I. a.; *bluonden,* from *blanden,* v. Rarely in MHG. *a* becomes *o* in the participle; e. g. *sworn* for *swarn,* from *swern.* This causes a change in NHG. to I. b. in *schwören* and *heben.*

In NHG. the ablaut is *a, u, a,* except in *heben, schwören,* I. b.

Grammatic change of *h* to *g* is regular in OHG. and later. In MG. *h* is elided between vowels; e. g. *slān, twān.*

Stān is anomalous; the forms are: OHG. *stān* (*standan*), *stuont* (*stōnt*), *standen* (*stān*); MHG. *stān* (*stēn, standen*), *stuont* (*stūnt, stōnt, stuot*), *standen* (*stan*); NHG. *stehen, stand, standen.*

The verbs belonging to this class are: —

OHG.	MHG.	NHG.
bachan, *bake*	bachen	backen
	blappen (participle)	
dwahan, *wash*	twahen	
faran, *fare*	faren	faren, fahren

OHG.	MHG.	NHG.
		fragen, s. and w., *ask*
galan, *sing*		
graban, *dig*	graben	graben
hefjan, *lift*	hebban, s. and w.	heben, *o, o.* See I. b.
hladan, *load*	laden, s. and w.	laden, s. and w.
hlahhan, *laugh*	lahhen, w.	lachen, w.
laffan, *lick*	laffen	
lahan, *blame*		
malan, *grind*	malen	malen, mahlen, s. and w.
nagan, *gnaw*	nagen	nagen, w.
sahhan, *quarrel*	sachen, w.	
scafan, *make*	schaffen, s. and w.	schaffen, s. and w.
scaban, *shave*	schaben	schaben, w.
sebban, *notice*	sebben	
slahan, *slay*	slahen	schlagen
spanan, *stretch*	spanen	
stān (irr.), *stand*	stan (irr.)	stehen (irr.)
sweran, *swear*	swern	swören, *o, o.* See I. b.
tragan, *bear*	tragen	tragen
wahan, *call*	wahen	
wahsan, *wax*	wahsen	wachsen
waskan, *wash*	wasken	waschen
watan, *wade*	waten	waten, w.

SUMMARY. — Strong in OHG., 25; in MHG., 22; in NHG., 14. Weakened in MHG., always 2, sometimes 3; in NHG., always 4, sometimes 4. Absent from OHG., 2; from MHG., 3; from NHG, 9. Total number of stems, 27.

Class V.

In Old Germanic the preterit was formed by reduplication, but in OHG. the reduplication coalesced with the stem syllable, and, where this had *a*, produced *ia* or *ē*; where the stem had *ā, ei*, the result was *ia* (*ea*); where it was *uo, ou* (*ō*), the contraction gave *io* (*eo*). All these became *ie* in MHG. except where final, when we have *iu*. In NHG. *ie* is invariable, though sometimes contracted to *i* before *ng*; e. g. *hing* or *hieng*. Umlaut of *a, ā* to *e, ǣ*, occurs in 2d and 3d pres. indic. sing. in late OHG. and MHG. There are five subclasses. In V. a. the OHG. ablaut is *a, ia* (*ē*), *a*; in V. b. *ā, ia* (*ea*), *ā*; in V. d. *ei, ia* (*ea*), *ei*; in V. c. *uo* (*ua, oa, ō*), *io* (*eo, ia*), *uo* (*ua, oa, ō*); V. e. *ou* (*ō, au, oa, ū*), *io* (*ia, ie, iu, eu, eo*), *ou* (*ō, au, oa, ū*). Beside these

we find in V. c. e. forms with euphonic *r* between the vowels of the past; e. g. *steroz*, V. e.; *pleruz*, V. c. Anomalous forms are *ern*, V. a., with umlaut in the present; *fāhan, hāhan*, V. a., with *ā* for *an*, and past and participle with *ng* (*hēng, fēng, hangen, fangen*).

In MHG. the ablaut is in the main the same. All pasts have become *ie* except in V. e. before *w*, where we find *iu, eu*, and *i*. MG. has *ī, ē* in these cases. In the present and participle MHG. has often *ū* for *ou* and *ō* in V. e. Elisions are more common in MHG. than in OHG. We have *hie, fie*, for *hieng, fieng*, and in MG. *hān, fān*, for *hahan, fahan*. *Lāzan* became *lān* in late OHG., and here has the past *lie*, by analogy of which is formed *hie* for *hiez; hizzen*, MG. from the same verb, is by analogy of Class II. OHG. *gangan* has a secondary stem *gān*, whence come a great variety of forms in MHG. Many verbs of V. c. show a tendency to Class III.; e. g. *hiuwen, hou, gehūwen; loffen, luffen; gebūwen; biozan;* and others.

In NHG. the ablaut is *a* (*ei, u, au, o*), *ie* (*i*), *a* (*ei, u, au, o*). *Gehen* has a present from a different stem; otherwise it is regular. *Hangen, fangen*, have taken the *ng* of the other forms into the present also.

The verbs belonging to this class are:—

	OHG.	MHG.	NHG.
V.a.	bannan, *banish*	bannen	bannen, w.
	blandan, *mix*	blanden	
	ern, *plough*	ern, s. and w.	
	fāhan, *catch*	fahen, fān	fangen
	fallan, *fall*	fallen	fallen
	faltan, *fold*	falten	falten, w.
	gān (irr.), *go*	gangen, gān (irr.)	gehen (irr.)
	hāhan, *hang*	hāhan, hān	hangen
		halsen, s. and w., *embrace*	halsen, w.
	haltan, *hold*	halten	halten
	halzan, s. and w, *limp*	halzen, w.	
	salzan, *salt*	salzen	salzen, w.
	scaltan, *dispose*	schalten	schalten, w.
	spaltan, *split*	spalten	spalten, w., Part. s.
	spannan, *stretch*	spannen	spannen, w.
	walkan, *full, walk*	walken	walken, w.
	waltan, *rule*	walten, s. and w.	walten, w.
	walzan, *roll*	walzen	walzen, w.

	OHG.	MHG.	NHG.
V.b.	bāgan, *fight*	bāgen, w.	
	blāhan, s. and w., *blow*	blǣjen, w., Part. s.	blähen, w.
	blāsan, *blow*	blāsen	blasen
	brātan, *roast*	brāten	braten, s. and w.
	lāzan, *let*	lāzan, lān	lassen
	rātan, *advise*	rāten	raten
	slāfan, *sleep*	slāfen	schlaffen
	trātan, *dread*	trāten	
	wāzan, *blow*	wāzen	
V.d.		eischen, s. and w., *ask*	heischen, w.
	heizan, *be called*	heizen	heissen
		leichen, s. and w., *dance*	
	meizan, *cut*	meizen	
	sceidan, *divide*	scheiden	= *scheiden*, II.
	sweifan, *roam*	sweifen	schweifen, w.
	zeisan, *tease*	zeisen, s. and w.	
	blōzan, s. and w., *sacrifice*		
V.c.	ruofan, s. and w., *call*	ruofen, s. and w.	rufen
	fluohhan, s. and w., *curse*	fluochōn, w.	fluchen, w.
	wuofan, s. and w., *weep*	wuofen, s. and w.	
V.e.	bōzan, s. and w., *beat*	bōzen, s. and w.	
	bouwan, s. and w., *dwell*	bouwen, s. and w.	bauen, w.
	houwan, *hew*	houwen, s. and w.	hauen, s. and w.
	loufan, *run*	loufen, s. and w.	laufen
	scrōtan, *bruise*	schrōten	schroten, w.
	stōzan, *push*	stōzen	stossen

SUMMARY. — Strong in OHG., 41; in MHG., 39; in NHG., 15. Weakened in MHG., always 4, sometimes 12; in NHG., always 16, sometimes 2. Absent from OHG., 3; MHG., 1; NHG., 13. Total number of stems, 44.

SECTION II. — THE NEW STRONG VERBS.

There are 45 additions to the strong verbs in MHG., and 7 in NHG. Some of these verbs are from Old Germanic strong verbs, for they have strong verbs corresponding to them in other Germanic dialects, and were doubtless present in OHG., though they fail to occur there in Mss.; others have probably the same origin, for we find ablaut derivatives in Germanic and other European dialects. Several, however, are produced from older weak verbs, and some appear without any related forms in the older dialects by which we can trace their

origin. Others are derived from foreign languages, or owe their present ablaut to a change of class. The analogy of words with similar sound has been often the cause of the change, and sometimes a sort of imitation of the meaning of the word by the sound seems to have been sought, as in our *kling, klang; ding, dong.*

There are a number of strong forms sporadically developed from weak verbs in MHG. to meet the exigencies of rhyme. These are merely personal idiosyncrasies, and I have passed them over hitherto. I will notice here those cases which are known to me, with citations according to Lexer's abbreviations: —

I. c. fürchten: forchten, Nib. 1723. 4, and elsewhere.
kunnen: kunnen (part.), Kindh. 70 and elsewhere.
wurchen: worchen, Lieds. 8. 74.
schenken: schank, Heldenbuch 547. 34.

II. glīchen: gleich, glichen, Virg. 289. 10, Wolfd. D. V. 59. 4.
krītzen: kreis, Koditz 78. 17.
prīsen: preis, prisen, Wolfd. 301. 4, Virg. 886. 3.

III. drouwen: drouwen, (part.), Fol. 158. 19; but see Schade Altdeutsches Wörterbuch, 2d ed., p. 960.

IV. jagen: jagen (part.), Karlem 206. 8.
laben: laben (part.), Boner. 54. 40.
laden: luot, Myst. I. 241, Otack. 363.
machen: machen (part.), Hugo v. Montf.
schaden: schuod, Ad. Eva 1289, Zimmersche Kr. IV. 225, 31, 35.
schamen: schamen (part.), Weinhold's MHG. Grammar.

V. begrāben: begrāben (part.), Teichner.
denen: dannen, Mart. 37. 60.
drāgen: drān, Weinhold's Allem. Grammar.
pfenden: pfenden (part.), Teichner.
salben: sielb, Gundack. 751.
weln: wiel, Schonebek 7097.
welben: wielb, Anzeiger 8. 481.

A reference to the list in Section I. will show that, of the MHG. 45 new strong verbs, NHG. keeps 11, weakens 6, and discards 28; NHG. adds 7, and has therefore 18 strong verbs not OHG.

The following 11 MHG. verbs are old, though not found in OHG. The arrangement is by classes: —

dehsen: cp. Lat. texo, Gk. τέκτων, Skr. taksh; Fick 3. 129.
rechen, Gothic rikan, I. a.; cp. also Fick 3. 249.
dimpfen: cp. OHG. dampf, dumpf, OE. damp, and Kluge, Wörterbuch 46.
drinden, OE. þrindan.
gelfen, OE. gíelpan, ON. gialpa.
selken, OE. séolcan.
gliten, OE. glīdan.
briezen, OE. brēotan, OS. brētan; Schade, Wb. 84.
smiegen, OE. smūgan, ON. smiuga; Schade, Wb. 832.
spriezen, OE. sprēotan; derivatives in OHG.
leichen, ON. leika, G. leikan, OE. lācan.

The following 15 are from older weak verbs: —

MHG. schrecken, OHG. scricchen, screcchōn, screcken W.
stemen, OHG. stemmen W. All derivatives have *mm;* e. g. stammeln, stumm.
delhen, OHG. delhan W.: cp. Scherer, Deutsche Spr. 241.
schinden, OHG. scintan W.: cp. ON. skinn; stem *skinþa-.
sterzen, OHG. starzen W.: *e* is here umlaut of *a*.
lichen, OHG. lichan, lichēn W., OE. līcjan W., G. leikan W.
nīden, OHG. nīden, nīdōn W., from OHG. nīd.
schīben, OHG. sciben W.
sprīten, OHG. spreitan W., OE. sprǣdan W. See Kluge, Wörterb. 324, but note the irregularity in the vowels; OGH. *ei* remains unchanged in MHG.
swīgen, OHG. swīgēn, OE. swīgian W.
halsen, OHG. halsēn, halsōn, halsan, halsen W.
eischen, OHG. eiscōn W., OE. āscian W.

NHG. dingen, MHG. dingen W., OHG. dingōn W., OE. þingian W.
preisen, MHG. preisen W., from O. French prīser.
fragen, MHG. vragen W., OHG. fragēn W.; cp. OE. frignan, Ic.

The following 5 are from nouns: —

MHG. brīsen, from MHG. brīse. The stem is isolated in MHG.
krīgen, kriegen MG. strong and weak, but LG. strong. From kriec, *war*.

lîmen, from MHG. lîm ; cp. OHG. lîmjan W.
schîten, from MHG. schît, OHG. scît, MG. schiten W.
NHG. schrauben, from NHG. schraube, MHG. schrûbe.

The following 4 are from strong verbs of other classes:

MHG. brimmen I. c. is from OHG. breman I. b., as is also MHG. brummen W.
glimmen I. c. is from OHG. glîman II. All old forms have *m*, but modern developments have *m* and *mm*. See Kluge, Wb. 110.
schîden II., from OHG. sceidan V., and scîdôn W.
swîfen II., from OHG. sweifan V. See Schade, Wb. 914.

The following 5 are borrowed from the LG.: —

MHG. splîzen, from LG. splîtan for an older *splintan I. c.; cp. OHG. sprîzan. Here, as often, *l* = *r*.
snûfen, snûben, from LG. snûven. NHG. schnaufen, schnauben, and schnupfen W. The stem is not found elsewhere.
NHG. keifen, from LG. kîven II.; cp. ON. kîfa, S. and W.
kneifen is originally identical with kneipen, from LG. knîpen II.: cp. ME. nîpen W.

There remain 12 isolated developments in MHG., the origin of which is still more or less doubtful.

MHG. brehen (to sparkle): cp. G. braho (twinkling), 1 Cor. 15. 52. No connection with ON. brâ. See Fick 3. 216.
regen: cp. MHG. regen W., ragen W., but no forms are older than MHG.
tremen: Schade, Wb. 952. Hardly to cp. trimz MHG.
derben: confined to MHG., NHG. The root is the same as that of sterben; starbh = starb and þarb.
drellen, from drǣjen: cp. Scherer, Deutsche Spr. 241.
klimpfen, from krimpfen. All Germanic and Slavic derivatives have *r*. This stem is isolated.
knellen. An onomatopoetic word; cp. OE. cnîell.
brîten. Perhaps cp. brîttel. Else wholly alone.
glîfen stands alone.
glîen stands alone.

tīchen stands alone.

blappen occurs only in Frauenl. 447. 20, and stands alone.

It will be observed that, of the 45 MHG. new strong verbs, but 11 remain strong in NHG., while 6 are weak, and 28 wholly discarded. This, when compared with the OHG. verbs, shows clearly that these new verbs rarely obtained a secure footing in the language. They remained strange to the popular ear, and usually soon fell into disuse.

SECTION III. — THE WEAKENED VERBS.

Many verbs which were strong in Old Germanic had become weak in OHG. These were noted in my paper in the Transactions of last year. The tendency grew in force in the MHG. and NHG. periods, though now it is greatly checked. Usually those verbs developed weak forms in MHG. which by the action of regular phonetic laws got a peculiar vowel in the present, which thus became more like a weak verb, and so followed their analogy. Verbs of Classes IV. and V. are peculiarly susceptible. Thus may be explained the regular weak forms of *lachen, sachen; halzen, bāgen, blāejen, fluochōn;* and the occasional weak forms of *komen; briuwen, kiuwen; heben, laden, schaffen; ern, halsen, walten, eischen, leichen, zeisen, ruofen, wuofen, bōzen, bouwen, houwen, loufen.* There remain, however, to be explained the occasional weak forms in the following: *jehen, schehen, pflegen; felhen, schinden, sinnen, smerzen; bīten, flīzen, krīgen, līchen, nīden, pfīfen, schrīen, schwīgen, schīten, spīwen, wīhen, zīhen.* Of these *schinden, līchen, nīden, swīgen,* were originally weak, which accounts for their weak forms. It will be seen also that the semivowels *h, w,* and a vocalic stem, favor weak forms, but several verbs still remain unaccounted for.

The verbs sometimes weak are distributed as follows: I. a. 3; I. b. 1; I. c. 4; II. 12; III. 2; IV. 3; V. 12. Always weak are 2 of IV., and 4 of V. In all, 37 sometimes, and 6 always, weak.

In NHG. the verbs which are weak in MHG. are either weak or obsolete; but of those sometimes weak in MHG., 9 are obsolete; 9 are always weak (*schmerzen; kriegen, neiden; brauen, kauen; walten, bauen, halsen, heischen*); 6 are strong and weak (*pflegen; -fehlen; speien; laden, schaffen; hauen*); and the remaining 13 are always strong; and yet NHG. has far more wholly and partially weak verbs than MHG. The weakening must therefore have been guided by other motives than in MHG. Though peculiar presents will account for a considerable number, many seem to become weak for the lack of derivatives, that by their various vowels might keep alive the consciousness of the ablaut. As long as *binde, band,* and *bund* remain in common use as nouns, the verb *binden* will be strong, while *hinken* with no such sustaining words may become weak.

Forty-six verbs are always weakened in NHG. They are: *gäten, kneten, lechen; hehlen, quälen, schwären, zehren; bellen, fersen, hinken, schwelgen, schmerzen, winken, wirren; gleissen, greinen, neigen, sweifen, kriegen, neiden; brauen, bläuen, kauen, niesen, reuen, smiegen; lachen, nagen, schaben, waten; bannen, falten, salzen, schalten, spalten, spannen, walken, walten, walzen, blähen, sweifen, halsen, heischen; fluchen, bauen, schroten.* I. a. 3; I. b. 4; I. c. 7; II. 6; III. 6; IV. 4; V. 16. In all, 46.

Forty-two verbs are sometimes found with weak forms in NHG., though they are originally strong. These are: *gären, pflegen; rächen, löschen; bersten, derben, dingen, dreschen, -fehlen, glimmen, klimmen, klingen, melken, quellen, schallen, schnellen, schmelzen; bleichen, gleichen, gleiten, scheiden, schleifen, speien, spleissen, weichen, keifen, kneifen, kneipen; kiesen* (*küren*), *sieden, riechen, saugen, schnauben, schrauben, triefen, -trügen* (*-triegen*); *fragen, laden, mahlen, schaffen; braten; hauen.* I. a. 2; I. b. 2; I. c. 13; II. 11; III. 8; IV. 4; V. 2. In all, 42.

If we contrast these results with those in English, we find that ME. has 51 sometimes, and 9 always, weak, against 37 sometimes, and 6 always, weak in MHG.; while NE. has 81 always weak, and 14 weak with strong participial adjectives, against 45 always, and 42 sometimes, weak in NHG.

Section IV. — The Obsolete Verbs.

Only a few words need be added in regard to the verbs that have dropped by the wayside. There seems no other cause for their passing away than that they were not needed and grew unfamiliar, because they had no group of derivatives to rely upon for support. This could be shown in detail by an examination of the obsolete verbs as they appear in the lists in Section I. From these lists it appears that 15 OHG. verbs have disappeared in MHG. These are divided among the classes as follows: I. a. 2; I. c. 4; II. 4; III. 2; IV. 2; V. 1. Beside these 15, the NHG. loses 69 OHG. verbs and 28 of the MHG. additions, making in all 111, distributed as follows: I. a. 10; I. b. 10; I. c. 35; II. 26; III. 8; IV. 9; V. 13.

Here too, though NHG. has lost more than a third, the NE. is more surprising in its changes. Out of 309 verbs, NE. has lost 155, or more than half; while ME. has lost 67, more than four times as many as MHG.

The numerical results of the foregoing study may be summarized in the annexed table. The first column contains the total number of stems which occur during the period covered; the second, those which are found in OHG. The third contains the number of MHG. verbs, while in the following column may be seen the number of those that are not found in OHG. but occur first at the MHG. stage. The next column shows how many of the MHG. strong verbs are found also with weak forms, and the following column gives the number of the OHG. strong verbs which are always weak in MHG. The same arrangement is preserved in the NHG. division of the table.

Class	Total strong stems.	OHG strong.	MHG strong.	MHG additions.	MHG strong and weak.	MHG weak.	MHG absent.	NHG strong.	NHG additions.	NHG strong and weak.	NHG weak.	NHG absent.	Class.
I. a.	30	28	28	2	3	0	2	17	0	2	3	10	I. a.
I. b.	26	21	26	5	1	0	0	22	0	2	4	10	I. b.
I. c.	87	73	82	13	4	0	5	45	1	13	7	35	I. c.
II.	72	51	64	17	12	0	8	40	4	1	6	26	II.
III.	43	38	40	4	2	0	3	29	1	8	6	8	III.
IV.	27	25	22	1	3	2	3	14	1	4	4	9	IV.
V. a, b, d.	34	31	31	3	6	3	0	11	0	1	13	10	V. a, b, d.
V. c. e.	10	10	8	0	6	1	1	4	0	1	3	3	V. c, e.
Total,	339	277	301	45	37	6	22	172	7	42	46	111	Total.

The following table summarizes the regular phonetic development of the ablaut. The first vowel is that of the present stem; the second is the vowel of the 1st and 3d person of the present singular; the third is the vowel of the 2d person singular and the plural of the present; the fourth is the vowel of the passive participle. The vowels placed in parentheses are modifications of those that precede, due to consonant influence. Where the NHG. ablaut has dropped one of the OHG. series, the gap is indicated by an *x*.

	OHG.	MHG.	NHG.		OHG.	MHG.	NHG.
I. a. 1st	e (i)	e (i)	e (i)	III. 1st	io (iu, ū)	ie (iu, ū)	ie (au, ū)
2d	a	a	a (o)	2d	ou (ō)	uo, (ō, o)	o
3d	ā	ā	*x*	3d	u	u (o)	*x*
4th	e	e	e (o)	4th	o	o	o
I. b. 1st	e	e	e (ä)	IV. 1st	a	a (e)	a (e)
2d	a	a	a (o)	2d, 3d . . .	uo	uo	u
3d	ā	ā	*x*	4th	a	a (o)	a (o)
4th	o	o	o	V. a, a, b. 1st, 4th	a, ā, ei	a, ā, ei	a, ei
I. c. 1st	e (i)	e (i)	e (i)	2d, 3d	ia (ea, ē)	ie (iu)	ie (i)
2d	a	a (u)	a (u, o)	V. c, e. 1st, 4th	uo, ō, ou	uo ō, ou	u, o, au
3d	u	u	*x*	2d, 3d	io (ia)	ie	ie
4th	o (u)	o (u)	o (u)				
II. 1st	i	i	ei				
2d	ei (ē)	ei (ē, ī)	i (ie)				
3d	i	i	*x*				
4th	i	i	i (ie)				

VII. — *On Combination and Adaptation, as illustrated by the Exchanges of Primary and Secondary Suffixes.*

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All building-up of grammatical structure in language, all production of forms, or of words having a radical part and a formative part, is carried on by the joint means of combination and adaptation. The beginnings of human speech are roots, or elements possessing no grammatical character — not being one part of speech more than another, nor exhibiting any of those distinctions of office which we mark by inflectional and derivative endings; and this absence of grammatical character is all that makes a root, in the view of the historian of language. No advance beyond the root-condition is, then, possible except by combination: unless, indeed, we are to regard formative endings as having sprouted out from roots; and this involves a theory of language so grossly physical that it may be simply set aside as absurd by those who refuse such a theory. It is also flatly opposed to all observation of the growth of linguistic forms during the recorded periods of language-history. These show by abundant examples how a word originally independent can enter into combination with another word, and finally become a mere modifying element in the structure of the latter; and they do not show that words win new elements of structure in any other way. It ought to be clearly seen and acknowledged, therefore, that those who reject this explanation of structural growth do it in virtue of denying the scientific principle that, in a continuous history of development, the earlier steps of development are to be explained by studying the later and observable steps, and reasoning back from these, with due caution and allowance for the difference of conditions, into the obscurer past. All real progress in linguistic science, however, seems plainly enough dependent on

the acceptance of this principle and its rigorous application. If it be abandoned, one man's guess in matters of language is as good as another's, and the pet theories of one period may be succeeded by those of a following one, without any prospect of an end.

But while there can be no form-making without combination and adaptation working together, their co-operation does not necessarily and always issue in forms. The combinations of roots may still be roots, modified or differentiated in meaning, increasing the vocabulary of a language, but not enriching its grammar, or giving it even the beginnings of a grammar, if it have had none before. In order to make a form, the process of combination must have a peculiar history. There must be a word of specially adaptable meaning, added to and combined with a whole body of other words, and impressing upon the latter an identical and apprehensible modification of meaning; then there is created the possibility that this common added element will retain its separateness while losing its independence, and so will assume the *status* of a formative affix, making a class of words or of inflectional forms to which it gives a common grammatical character. This is the plainly traceable process by which have been made in later times the most recent accessions to the stock of formative elements, in languages of which we can follow the history: familiar and especially accesssible examples are our English *-ly* (adverb), the French *-ai* (future) and *-ment* (adverb), the Germanic *-d* (preterit), and so on. And our own languages offer abundant examples of processes of combination and adaptation that seem on the way to suffix-making, without actually reaching that end. No one would suspect the word *road* of any formative capabilities, in however many compound words it may be used — as *railroad, tramroad,* and so on; the almost equivalent *way,* however, comes perceptibly nearer to a formative office, in *straightway, alway, lengthways,* etc., as does *wise* in *likewise, otherwise, crosswise, nowise,* etc.: either of these last might be said to have had antecedently a better chance of becoming an adverbial suffix than the adjective *like,* out of which our *ly* is actually made; but the chances of lin-

guistic history did not so bring it about. Moreover, out of the different combinations of the same element may be illustrated both the suffix-making and the non-suffix-making processes of combination. Our *like* is formative in words like *manly* and *friendly*, and in words like *truly* and *ably;* but in *such* and *which* (from *so-like* and *who-like*) it is present without any formative value. So *pre* is an English formative, in such words as *pre-existence*, *prejudge*, *pre-adamitic*, and *con* in *conjoin*, *conjuror*, and the like; but they have no shadow of formative force in *preach* (*pre-dicare*), *cost* (*con-stare*), *count* (*con-putare*), of which they are equally a part. Words like *such* and *which* and *preach* and *cost* are, in the proper sense of the term, radical in English speech, just as much as *this* and *mine* and *speak* and *love;* for the fact that our historical knowledge chances to put it within our power to analyze the former set one stage further back, pointing out the last process of combination and fusion they have undergone, makes no essential difference; no reasonable person will hold that the other set go back as roots to the ultimate period of human speech-history, or that they too are not the products of a combination, only of one that lies too far in the past for us to trace out. Many (perhaps even most) linguistic scholars appear to be under the impression that, when they have dissected out and demonstrated the roots of a given language, they have come to the foundation, and established something really original. But that is far enough from being the case. In all probability, there lies behind us in the history of language such an immeasurable unknown past, that between the roots of English and the Indo-European roots there is but a trifling difference in point of originality. In every language, new roots are constantly being wrought out or brought in, and invested with just that amount of formal variation (if any) which the language has at the moment at its disposal; the new material is assimilated to the old; and, after a time, no one can tell which is new and which is old.

Indistinct views upon such points as these lead to serious errors in regard to linguistic history. For example: a philologist of high rank and great achievements (Lepsius), some

years ago, recalled and urged attention to the fact, not unknown before, that evidence preserved in the literature and dialects of Chinese proved the monosyllabic root-words (as they had been generally viewed) of that language to have once had a fuller phonetic form, showing plentiful signs of final consonants where now there are none, which final consonants might perhaps be the relics of second syllables; and he proceeded at once to draw the inference that the Chinese is not a root-language, that it has behind it a career of grammatical development, and that its words of one syllable are only worn-out forms, like those, for example, of which the English is so largely made up. And these conclusions have been taken up and pressed since by other scholars, some of whom have even appeared to think that in them lay the final and irrecoverable overthrow of the root-theory of language. Yet nothing can be plainer than that they find no sufficient support in the facts on which they profess to be founded. To give them any substantial value, it must be shown, first, that there are no languages having final vowels or even second syllables to their roots while yet destitute of grammatical structure; or, secondly, that the Chinese finals have a demonstrable formative value; or, thirdly, that the grammatical character and use of Chinese monosyllables is so closely analogous with that of English monosyllables as to compel us to postulate behind the former a formal development such as we know to have preceded the latter. Those who comfortably accept and repeat the Lepsian theory without concerning themselves about these three difficulties that lie in its way, or trying to remove them, cannot expect that their advocacy will count for much in its favor. Any real and seriously conducted argument to show that the Chinese was not always so jejune as it now appears, but once possessed a system, however scanty, of formally expressed grammatical distinctions, will be received with respect and a hearty welcome by all who are interested in the history of language; I am not aware that any one has ever attempted such an argument. Of a language possessing in its roots final consonants and second syllables in which no grammatical value has been found traceable, we could not well have a more

striking and more dignified example than the ancient Egyptian, the language of the hieroglyphs; if nevertheless they are roots, why should the Chinese elements of similar phonetic constitution be assumed, in anticipation of any proof to that effect, to be grammatical forms? There are very fair phonetic reasons for holding the theory that all dissyllabic roots, or roots even with final consonants only, are and must be the result of combination; the theory may be some day raised to the value of an established principle; but it will then still remain to be determined in any particular case, by evidence, whether the combination was or was not of a grammatical nature.

Again, while adaptation is a necessary aid to combination in the process of form-making, since mere agglutination can never make forms, it is by no means limited to this department of action. On the contrary, it is an element of universal presence and efficiency in all language-history, in languages of every period and grade of development, and in every part and parcel of their material. Accompanying combination, it sometimes leads to the possession of forms; acting by itself, it sometimes provides means of another kind by which the purposes of forms are answered. The same element, meaning 'set' or 'make,' which in combination yields the *d* of *loved*, in independent adaptation becomes the *did* of *did love;* the same element, meaning 'seize' and 'possess,' which in combination becomes the *ai* of *monterai*, 'shall mount,' in independent adaptation takes the two very diverse offices instanced in *ai à monter*, 'have to mount,' and *ai monté*, 'have mounted.' The whole store of auxiliaries and form-words is won in no other way than this, whether used, as in our family of languages, to supplement the resources of formal expression, or, as in some other families, to supply their place. Grammatical classes of words are thus made, which may rise, and in fact not seldom do rise, to the value of "parts of speech." Thus certain demonstratives and numerals (either with the fortuitous aid of phonetic divarication of form, as in English, or without it, as in French and German) are turned into "articles"; thus interrogatives and demonstratives become "relatives"; thus adverbs either add or substitute the value of

"prepositions"; thus "conjunctions" are made, out of materials of no small variety—and so on through a long catalogue. The same adaptation is seen in phrase-making, of every period, from what is obsolescently formal, like *come to pass*, down to colloquialisms and slang, like *knock under* and *give away;* it is seen in the elaboration of a moral and intellectual vocabulary out of the physical; it is seen in the whole refining process by which a language is made throughout capable of other, higher, and more varied uses. Its possibility rests on the fundamental character of language as a body of conventional signs, which can be indefinitely turned to new purposes by its users, and which must be so turned, if its users have any new purposes to serve. It is inseparable from the life of all language, and is the most pervading and intimate expression of that life. In a language without structure, like the Chinese, it gives the distinction of "full" and "empty" words (which is what in Chinese comes nearest to the distinctions of inflective speech), and it supplies the immense variety of meaning and application out of which the general make-up of the sentence allows the intended meaning in the given case to be selected by the quickly apprehending mind.

To imagine that, because adaptation thus performs an important part along with combination in developing the structure of an inflective language, and because in a structureless language it produces a sort of *succedaneum* for structure, it therefore is by itself capable of producing structure—so that, for example, the question can be raised whether "agglutination or adaptation" is the efficient principle in Indo-European development—is wholly wrong, and argues a most imperfect comprehension of the facts of language. Form-making by simple adaptation is an absurdity; adaptation can only assign the products of combination to new and further differentiated uses, even as it exercises this power over the radical elements themselves in such cases as that just referred to. It is easy to sketch the main features of its action to this effect in Indo-European language-history. The earliest probable example is the distinction of pronominal from so-called verbal roots; this appears to have been the result of a gradual attenuation

and dissimilation of meaning, prior to all formal development, and analogous with the Chinese distinction of "empty" from "full" words. Of much later examples, one of especial importance is the gradual differentiation of the noun into noun-substantive and noun-adjective, or noun and adjective; for their distinction has no formal foundation, and is posterior to the complete establishment of noun-inflection. Hence comes the "concord" of the adjective with its substantive; this is no result of a specially delicate "sense of form" in Indo-European speakers — as, indeed, any such explanation of language-facts is mere sentimental fancy; there is always something concrete and palpable at the base of them. Another example is the distinction of adverbs from case-forms (as explained by the author before the Association two years ago: see the Transactions for 1882). Others are the distinction of infinitives and participles from ordinary nouns and adjectives, and those already referred to above, of conjunctions, of articles, of relatives, and the like. When these are subtracted, there remains of the formal structure of the languages of our family only verb-inflection, noun-inflection, and the apparatus of stem-making suffixes. Original identities and gradual differentiations by usage are to be suspected here also, and even back to the very beginning, when predicative forms or verbs were first made. The difference even of noun and verb, the most fundamentally important in Indo-European grammar, may be a matter of differentiated use, in combinations of originally identical value: as in some languages of less developed structure, like Egyptian and Turkish, in one and the same combination, the pronominal ending is now possessive, conditioning a noun, and now subjective, making a verb. Nor is it at all improbable that the earliest suffixes of derivation and of inflection were the same thing, with two faces or aspects of value, little as we may be able to do in the way of proving it. Upon all such points, light is to be expected rather from the study of ruder tongues than from any perfecting of the processes of historical analysis as applied to our own tongues; because, in the latter, original processes are too much covered up under later accretions.

When the roots of a language have once been clothed throughout with formative elements, or made into forms, no further provision of formative elements is possible except by additions to such forms — that is to say, all new endings will be of secondary character. Thus, for example, such a form as *monterai* can be made only by combining the auxiliary *ai* with the form *monter*, not with the root itself; and here, throughout the whole formation, the infinitive *r* happens to remain, to betray the origin of the tense. A like thing is unquestionably true of the combination with *did* which makes *love-d*, though even in the earliest Germanic nothing is left to show clearly what the form was to which the auxiliary was added. But *monterai* has come to seem to the users of the language as direct a formation from the root *mont*, with added tense-sign and endings, as, for example, *montasse* — which, indeed, is in all probability by origin another case of the same kind, only so much older that the historical student of language can no longer trace its genesis with anything like the same confidence. When the secondary character of a combination is lost sight of, the combination becomes to all intents and purposes primary, and may be propagated as such. In this way, reduction to primary value becomes possible in formative, as well as in radical elements; and the semblance of root and immediately added ending, both made out of material of later date, is kept up throughout the whole history of a language. Hence it appears that the distinction of primary and secondary suffixes, however well marked in the main, is after all of the same doubtful and changeable character, dependent on shifting usage, which belongs to grammatical distinctions in general, as abundantly instanced above. This point admits of interesting illustration by a series of secondary formations in Sanskrit, which have won the aspect of primary formations, and are so used in the later or classical Sanskrit.

The most prominent example is that of the gerundives, or future passive participles, corresponding in use quite closely with the Latin formation in *-ndus*. The native Hindu grammar, with its usual carelessness of historical accuracy, describes them as made directly from the root, with the suffixes *anīya*,

tavya, and *ya*, and gives rules for the treatment of the root before them: thus, from root *kṛ*, 'do or make,' come *kar-aṇīya*, *kar-tavyà*, and *kār-yà*, all alike meaning 'faciendus.' But such forms as *karaṇīya* are entirely wanting in the oldest Sanskrit, that of the Rig-Veda; they begin to appear, but sparingly, in the second period, that of the Brāhmaṇas (there are two rather doubtful cases in the Atharva-Veda), and grow somewhat more common later, without ever attaining real frequency — although, taking the whole literature together, a respectable list of them can be quoted. And at the start they are palpably and undeniably a secondary formation from the extremely common *nomen actionis* in *ana*, with the added adjective suffix *īya*, making adjectives that signify general pertinence or concernment. Such is the value of no small part of them throughout; and the line between the gerundival and the more ordinary adjective use is in other cases not always easy to draw. Beyond all question, *karaṇīya* is properly to be divided *karaṇ-īya*. The history of the gerundive in *tavyà* is nearly parallel with this: it is unknown in the Rig-Veda, begins with two examples in the Atharva-Veda, and then gains rapidly in frequency, becoming much more common than the formation in *anīya*; it differs from this also in never having any other than a gerundival meaning. It is really made from the verbal noun in *tu* (the same from which comes also the ordinary infinitive in *tum*), by addition of the secondary suffix *ya*, before which the final *u* of *tu* is strengthened to *o* (*āu*), and this converted to *av*, as is usual with that final: compare the ordinary adjectives *hanavyà* from *hánu*, *madhavyà* from *mádhu*, *paçavyà* from *paçú*, and the like. The accent *tavyà* (all the examples accented *távya* in the Petersburg lexicons, larger and smaller, are errors) shows that the real form of the secondary suffix is *ía*; and it is, in fact, in all probability originally identical with the *ī'ya* (or, as it appears in other formations, *íya*) which makes *karaṇī'ya* etc. In the Rig-Veda, which (as already noticed) lacks both these formations, their place is in good measure taken by similar secondary derivatives with simple *a* from the same *nomen actionis* in *tu* from which the words in *tavya* come: thus, *kártva*

(i. e. *kártu-a*, and, in fact, requiring so to be pronounced in Rig-Veda verse) = *kartavyà*, 'faciendus.'

The case of the gerundives in *ya* is not so clear, and I have treated it as doubtful in my Sanskrit Grammar; but I am more and more inclined to believe that, as this suffix is palpably secondary in character in the great body of words made by it, so it is also in the rest; and that even where it has most of a primary aspect, this is only illusive. To classify and discuss here its diversified uses is unnecessary; the other examples are enough to establish the point desired to be made: that the gerundive formation in Sanskrit is in the main, if not wholly, a secondary one, and of comparatively recent development. In the later or classical language, however, these endings of compound and secondary origin are treated as primary; and derivatives with *anīya* and *tavya*[1] are made directly from the root, as much as those in *ya*, which have a less demonstrably secondary character, or as those in *ana* and *tu*, which perhaps are after all equally secondary, could we only trace out their history a little further.

Another notable example is that of the suffix *in*. This is, through the whole history of the Sanskrit language, one of the commonest secondary adjective suffixes, signifying possession: thus, *bala*, 'strength,' *balin*, 'possessing strength, strong'; *pucha*, 'tail,' *puchin*, 'having a tail, tailed.' Like several other conspicuous suffixes, and like the great class of possessive compounds, it has won this particular meaning doubtless by specialization from the more general sense of appurtenance. But there is also a considerable class of words made with it, and that even from the earliest period, which are reckoned as primary, and have that aspect, being the grammatical equivalents of present participles, and governing participially an accusative: e. g. *kāmin*, 'loving,' *kānkṣin*, 'desiring,' *abhibhāṣin*, 'addressing,' *satya-vādin*, 'truth-speaking.' But it is entirely evident that the suffix is the same in both uses, and that *kāmin*, for example, really means 'having love,'

[1] Of course it follows that Sanskrit derivatives in *tavya* are not to be compared with Greek verbals in τεος, as if they were an Indo-European formation — unless, indeed, a like development can be demonstrated for the words in τεος.

being made from *kāma*, 'love'; that it admits a participial construction is in accordance with numerous facts in the Sanskrit language, where the distinction between ordinary adjectives and verbal adjectives or participles is much less marked than in most of its kindred, and words of the former class are constantly stepping over into the other. The derivatives *kāmin* and *vādin* and their like can be made, artificially, to come directly from the roots *kam* and *vad*, with suffix *in* and second-grade strengthening of the radical vowel; and in later Sanskrit they are actually so made, because to the users of the language they seem so; the suffix has won a primary value and application; but there are numerous instances in the older language to which that explanation will not apply: for example, *vighanin*, 'slaying,' which can come from the root *han* only through the derivative noun *ghana;* and *garbhin*, 'pregnant with' (also governing an accusative), from *garbha*, 'fœtus.'

Again, a well-defined and much-used *nomen agentis* in later Sanskrit is made with the suffix *aka:* thus, *kār-aka*, 'a doer or maker,' from the same root *kṛ*, 'make,' which has been used in illustration above; it, too, occasionally has an accusative object, like a participle: for example, *mithilām avarodhakas*, 'besieging Mithilā.' But here, again, the formation is altogether wanting in the older language; and as it makes its appearance, one sees clearly that it is produced by adding the general (secondary) adjective-suffix *ka* to a derivative noun in *a:* that is to say, *kāraka* is not *kār-aka*, but *kāra-ka*, 'concerned with making'; and *avarodhaka* is *avarodha-ka*, 'concerned with siege.'[1]

Another case quite analogous with the last is presented by the nearly equivalent suffix *uka*. This is, however, peculiar in regard to its range in the history of the language. Wanting in the earliest period (there is a single example of it in the Atharva-Veda), it is also quite rare in the later language, while it is a frequent and characteristic formation of the in-

[1] Hence is seen the worthlessness of Müller's explanation of the Germanic word *king* etc. as the correspondent of Sanskrit *jan-aka*, 'father': as if *aka*, which is not even so old as early Sanskrit, could be dealt with as an Indo-European suffix! The anachronism it involves is so palpable, that the etymology can only be called a blunder.

termediate or Brāhmaṇa literature, being made from over sixty roots there, and not at all infrequent of occurrence, with the value of a present participle. That it is, however, of secondary and compound structure, is not to be questioned; it comes by addition of *ka* (the same as seen in *aka*) to a derivative in *u*. Adjectives in *u*, with the same participial value, are made in Sanskrit in considerable numbers; but, by a peculiar limitation of use, they come in the main from secondary conjugation-stems, especially desiderative; whereas the words in *uka* are made from the base of primary conjugation, and those in *u* from which they are made can only in a few instances be pointed out in independent use.

Other examples of the same kind could be brought forward, yet less clear and instructive than these — which, then, may suffice for their purpose. They show that the analysis of suffixes into simpler elements, in which comparative philologists often indulge, has a historical basis and justification; they show, also, in what way compound suffixes are made: by the addition, namely, of one suffix to a form already ending in another, and then the fusion of the two into one.

Since the general tendency in language is toward fusion and the disguise and loss of original value, it is much easier to illustrate the conversion of secondary suffixes into primary than that of primary into secondary. Yet there are instances of the latter conversion also, more or less completely carried out. In Sanskrit, the suffixes *īyas* and *iṣṭha* make directly from roots comparative and superlative adjectives which have in general no connection except that of association of meaning with any positives; and the agreement in this respect with the corresponding Greek ιων and ιστος shows that the restriction was a pre-historic one. Yet, as the one of these has become in Latin the ordinary comparative ending, making secondary derivatives from adjectives of every kind, so there are beginnings of such use in Sanskrit also — which might have ended in the same way, if another pair of equivalent endings, *tara* and *tama*, had not by their growing popularity crowded the *īyas* and *iṣṭha* quite out of use as means of making new words.

Another case is that of the suffix *ta*, forming past or passive participles through the whole history of Indo-European language; in later Sanskrit it may be added as secondary suffix to almost any noun or adjective, making derivatives meaning 'possessed of, affected by,' and the like: thus, *gharmita*, 'heated' (*gharma*, 'warmth'); *durbalita*, 'weakened' (*durbala*, 'of little strength'), etc. This use is precisely analogous to that of our own participial suffix *ed* in such words as *blear-eyed*, *four-sided*, *three-tined;* and it has plainly come, in the one case as in the other, through the medium of a much used denominative-verb formation, especially common in its participles, which then have made it seem that any noun-stem may be turned into participial form, whether there be or be not a denominative verb made from that particular stem. But the suggestion of a possible denominative formation lies so near that the conversion to secondary value can hardly be regarded as complete. Such examples merely help to show the uncertain and shifting nature of the distinction between primary and secondary suffixes, as of so many other of the grammatical distinctions of language, all growing together out of the nature of the material of which language itself is composed, as arbitrary and conventional sign-material, ever convertible to new purposes under the exigencies and in obedience to the suggestions of practical use. This is an instance of minor consequence, but it illustrates a truth of widest and deepest significance in the history of human speech.

VIII. — *On Latin Glossaries, with especial reference to the Codex Sangallensis* 912.

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During the past ten years there has been a marked increase of attention paid in Germany and elsewhere to the problems of Latin lexicography. In this connection the old Latin glossaries have assumed a fresh importance, as containing a mine of new and old words not yet sufficiently explored. This renewed interest is largely due to the efforts of the late Dr. Gustav Loewe, who published in 1876 his masterly Prodromus Corporis Glossariorum Latinorum, and up to the time of his death was diligently engaged in collecting materials for a grand corpus. These collections have now passed into the hands of Loewe's colleague, Prof. Georg Goetz of Jena; and the Königliche Sächsische Gesellschaft der Wissenschaften is to furnish the means for the further prosecution of the undertaking.

One of the most remarkable features in the history of Roman literature is the surprising activity with which grammatical studies were carried on in the last century of the republic and the first two centuries of the empire. When Verrius Flaccus composed his work, De Verborum Significatu, he must already have had a large stock of material to draw from, and his alphabetical lexicon doubtless resembled in its fulness an encyclopædia rather than a common dictionary. Upon this work later writers drew when they wished to make a show of learning. Nettleship[1] has shown the dependence of Aulus Gellius, Nonius Marcellus, Macrobius, and Servius upon Verrius, and has done much to indicate the lines upon which a partial reconstruction of the work of Verrius must proceed. The relation of the Placidus glosses to Verrius has been pointed out by Loewe; and they have been well edited by Deuerling,[2] although

[1] Cf. American Journal of Philology, Vol. II. pp. 253–270, Vol. III. pp. 1–17, 170–192.

[2] Luctatii Placidi Grammatici Glossae, rec. et illust. A. Deuerling, Leipsic, 1875, and Glossae quae Placido non adscribuntur nisi in Libro Glossarum, A. Deuerling, Munich, 1876.

many still remain to be reclaimed from the older glossaries. Loewe shows that where Paulus in his epitome of Festus gives only the nominative of a substantive, or the first person singular of a verb, Placidus often gives the exact form used ; so that, in the collection of the fragments of early authors, much more weight must be attached to the testimony of Placidus than has been the case hitherto. E. g. Varro L. L., V. 153 says, "In circo *carceres* unde emittuntur equi, nunc dicuntur *carceres*. Naevius *oppidum* appellat." Placidus p. 57 gives *iuxta oppidum : prope carceres*. Hence we may be almost certain that Naevius wrote *iuxta oppidum*. So where Paulus 89 says that Cato used *futare* in the sense of *saepius fuisse*, Placidus has 44 and 45 *futavit : fuit, futavere : fuere*, which definite forms may doubtless be referred to Cato.[1] So nearly all glossaries compiled from different sources contain oblique cases of substantives, or verb-forms not in the first pers. sing. of the present indicative or in the present infinitive, which we may be certain actually occurred ; and although we may not be able to assign them to any definite author, they have their value for the study of forms.

For example, Georges cites for the use of *abstare* Horace, Ars P. 362 (*abstes*) and Plaut. Trin. 264 (*abstandus*). Loewe, Glossae Nominum, p. 204, cites glosses containing the forms *abstat*, *apstant*, and *absto*. To these must be added from the Sangallensis 912 *abstans : distans* A 44. Vergil, Æn. IV. 606, uses the form *extinxem*. So we find E. 255 *extixe : extincsisse*, which would prove the existence of the form *extinxe*, unless indeed we suppose that the gloss originally referred to the Vergilian passage, and that the final *m*, as frequently, has been lost.

Nearly every large library in Europe has its old Latin glossaries. They range in date from the seventh century down to the fourteenth and fifteenth. The Bibliothèque Nationale in Paris is especially rich in manuscripts of this sort, many of which I have examined. In the Vatican, at Leyden, Munich, Milan, St. Gall, Berne, Vienna, and elsewhere are found valuable glossaries, most of which have never been edited, although in some cases large excerpts have been made. The character of the results which may be expected from a careful editing of the more important of these glossaries I hope to illustrate by some remarks upon the Codex Sangallensis 912, which I afterwards print in full. Of this codex Loewe, Prodromus, p. 139, says: "Cum codicibus Vaticano (3320, saec. IX.) Vindobonensique (2404) consentit etiam codicis Sangallensis 912 praecipua glossa-

[1] Cf. Loewe, Glossae Nominum, p. 95 ff.

rum materia. Sangallensis praeter Vaticanum 3321 omnium codicum quotquot hac usque noti sunt vetustissimus." It belongs to the latter part of the seventh or the beginning of the eighth century. In form duodecimo it contains three hundred and twenty pages (of which pp. 1–3, 159, 160, 196, 230 are left blank), with an average of about sixteen glosses to the page. Altogether it has about five thousand one hundred and fifty glosses, of which the largest number for any one letter (six hundred and twenty-two) fall to C, while P has five hundred and twenty-six and S four hundred and fifty-seven. Most of the words are Latin. Not a few Hebrew words and proper names, however, occur, due to ecclesiastical sources; and there are numerous Greek words in Latin transliteration. Singularly enough, one Gothic word is found. B 38 *baltha: audax. Gothice* is written on the margin. The glossary begins with *abba: pater*, and closes with *Zipherus: ventus* EXPL. ERMENEUMATA DŌ GRATIAS AMEN.

The orthography of the Codex deserves our careful consideration; for it throws light upon the pronunciation and phonetic changes of a comparatively late period, and has a value for the student of the Romance languages.

Moreover, a conspectus of the bad spellings which are common is often helpful for the emendation of difficult glosses. There is, of course, danger of referring to a phonetic cause mistakes which are purely palæographical in their origin, as the confusion of *c* and *t*, of *c* and *g*, of *s* and *r*, of *a* and *u*, etc., due to a resemblance in the form of the letters; but where a bad spelling is constant or frequently repeated, it usually has a phonetic significance. I can only give here comparatively few instances under each head; but the examples given by Schuchardt in his Vokalismus des Vulgärlateins might be largely increased from this codex.

Consonants.

d for *t*, very frequent:[1] *aboditur* A 40, *abscondida* 58,[2] *amicidia* 62, *padior* 173, *nodrix* 267, *appedit* 320, *pudridum* C 195, *consuedudo* 553, *penades* P 212, *odiosi* R 96, *scadit* S 60, *solidudo* 291, *todidem* T 164, *aequides* 178.

t for *d*,[3] much less frequent: *innotata* A 122, *multituto* 189, *stopite*

[1] Cf. Schuchardt, I. 124; Seelmann, Die Aussprache des Latein, 309.

[2] Where no letter is added, the word occurs under the same letter as the word preceding.

[3] Cf. Schuchardt, II. 257; Seelmann, 309.

B 53, *canditi* 60, *bipetalis* 118, *complutere* C 430, *metriatrix* I 360, *Atriatici* L 102, *splenditum* 139, *sorditum* 175, *sorditus* O 43, *palutamenta* P 30, *cupitidas* S 3.

g for *c*:[1] *agonita* A 203, *praefugat* = *praefocat* 283, *simulagra* 347, *belligusa* B 73, *belligare* = *vellicare* D 84, *verrugas* M 96, *mulgatores* 143, *negromantia* N 54, *pupligatum* P 438, *progatia* 439, *trages* T 32, *truges* 208. One of the earliest examples of this change of surd to sonant, which was persistent, is furnished by *negotium*; so, too, *neglegens*. The proximity of *l* or *r* favors it; as G. 71 *gremia* for *cremia*, although Mommsen, Ulp. dig. 32, 55, 4, retains *gremia*. Compare also *sagrarium* B 9 (cf. It. *sagramento*). Interesting is *grotalus* O 121 (cf. It. *agrotto*, Sp. *ocroto*, both derived from *onocrotalus* by G. Baist, Romanische Forschungen, I. 445).

c for *g*. These cases are to be received with caution, as it is often difficult to decide whether the Ms. has *c* or *g*. *G* being differentiated from *c* only by a slight stroke, some of these cases may be due to the carelessness of scribes. It is probable, however, that as *c* was often pronounced *g*, so *c* was often written for *g*, but pronounced *g* ("Umgekehrte Schreibweise"). Schuchardt, II. 413, says, "Die Verwandlung des *g* in *c* ist zwischen Vokalen unmöglich." *abiucassere* A 16, *abgreco* 50, *agacula* 192, *navicio* 220, *antaconista* 279, *locobris* 397, *clanco* C 148, *coaculatum* 467, *elivicata* E 46, *prodicus* P 442, *repacula* R 91, *propaco* S 265, *tecula* T 28.

b for *p*:[2] *aborreas* A 27, *abricum* 67, *crebindia* C 263, *crebido* 265, *scabum* S 64, *obtima* 217.

p for *b*,[3] infrequent: *puplica* A 444, *pupligatum* P 438, *puplice* 467. Cf. *Puplicus* in inscriptions, *opproprium* O 149, *vipurna* V 105.

b for *v*.[4] The vulgar confusion of *b* and *v*, from the second century on, is well known. Examples very numerous. *Ababus* A 2, *abita* = *avida* A 24, *flubius* 80, *bispillus* B 106, *bobinatores* 130, *obserba* C 122, *silbas* 222, *fabor* F 1, *serbus* M 42, *prelibabimus* P 129, *quibi* Q 30.

v for *b*: *duvium* A 61, *acevitas* = *acerbitas* 73, *duvitanti* 218, *cavallares* 253, *sivi* 269, *vaccae* B 43, *cavallus* C 7, *cavallarius* P 356, *bivendum* S 191, *lividinantes* 362.

ti for *ci*:[5] *dilitias* A 133, *apitiosus* 301, *sotius* C 369, 382, 431, 544, *commertio* 394, *sotietate* 427, *caltiamentum* 589, *untias* D 242, *homuntio* H 133, *mendatium* I 212, *sautio* M 179, *fallatia* P 118, *audatia* 439, *sautius* S 52.

ci for *ti*: *precium*, O 127.

c dropped before *t*:[6] *autionarius* A 433, *autio* 444, *contratus* C

[1] Cf. Corssen, I. 77; Schuchardt, I. 124 ff.; Seelmann, 346.
[2] Cf. Schuchardt, I. 124, 127, 144 ff.; Seelmann, 299.
[3] Cf. Seelmann, 299.
[4] Cf. Schuchardt, I. 131; Seelmann, 239 f.
[5] Cf. Seelmann, 323.
[6] Cf. Seelmann, 278, 348.

542, *defunturium* D 119, *funtio* F 240, *iunturi* R 148, *coniuntum* S 38.

n dropped before *t*:[1] *cantates* A 163, *ardetes* 353, *hydromates* H 66, *laterna*[2] L 18, *fulgetes* 27.

n dropped before *d*:[3] *compedium* C 545.

Perhaps in D 68 *depenendi : reddendi*, *n* is for *nn* = *nd dependendi*. Compare *dispennite distennite*, Plaut. Mil. 1407.[4]

ss for *ns*: *condessat* A 84.

ns for *ss* : *consensus* C 133, *defensus* D 83.

n inserted before *s* :[5] *pertensum* P 300.

n dropped before final *s* :[6] *freques* C 198, S 91, 98, *flagras* F 82, *ingeminas* I 227, *obnites* O 56, *loques* 166.

s for final *x* : *arupes* A 348, *senes* D 6, G 65, *mermis* M 76.

s for *sc* :[7] *resiscere* R 103.

Dropping of final *m*, frequent : *aliena* A 14, *lege* 58, *aliena terra* 102, *arcu* F 198, *ad ira* P 486, *pala* V 159.

Dropping of final *t* : *aberunca* A 9, *tolle* = *tollit* 14, *demitti* M 105, *peiera* P 199. So often in verb-forms.

H is very frequently omitted or falsely added : *abitudo* A 15, *actenus* 81, *achademia* 86.

f for *ph* is very frequent. Cf. F 23, 58, 65, etc.

l for *d* is found in *apoliterium* A 317.[8]

g for *i* = *j* in *degerat*[9] D 150.

g dropped between vowels[10] in *frius* H 113. Cf. *panorum* for *paganorum* P 55.

Worthy of mention is G 53 *gneumon : dicitur pulmo*, which may be accounted for in this way. The scribe found *neumon* for *pneumon*, just as in Pliny, N. H. XIX. 60, certain Mss. have *neumaticis*. Having a consciousness of some silent letter, he prefixed *g*, after the analogy of *gnatus*, *gnavus*, *gnosco*, and *gnomon*. Compare the "Umgekehrte Schreibung," cited by Schuchardt, I. 144, *pturmae* for *turmae*, from an inscription of about 200 A. D.

Vowels.

o for *ŭ* :[11] *aboditur* A 40, *nodrix* 267, *degostat* D 156, *fotiles* F 187, *gostata* H 9.

o for *ŭ*, very frequent :[12] *colmine* (cf. *columen*) A 103, *intolit* 108, *oc-*

[1] Cf. Seelmann, 283.
[2] Cf. Saalfeld, Tensaurus Italograecus for *lanterna*.
[3] Cf. Seelmann, 283.
[4] Cf. Seelmann, 312.
[5] Cf. Seelmann, 285; Corssen, I. 255.
[6] Cf. Seelmann, 284.
[7] Cf. Schuchardt, I. 145; III. 75.
[8] Cf. Seelmann, 310.
[9] Cf. Schuchardt, I. 72.
[10] Cf. Seelmann, 349.
[11] Cf. Schuchardt, II. 181 ff.
[12] Cf. Seelmann, 216; Schuchardt, II. 149 ff.

corro 114, *aemolo* 134, *locrum* 140, *aercolus* 162, *volocres* 228, *stopite* B 53, *copidus* 75, *oxore* C 206, *foturum* F 189, *iovenalis* I 178, *doplans* 227, *orbanitas* S 15, *simolat* 207, *sporca* 319.[1]

u for *ŏ*:[2] *furmula* D 297, *cupiosus* F 102, *ferux* 113, *futa* 172, *verbusitas* G 11, *custudia* 13, *nubeli* 69, *murio* H 35, *fluritum* 112, *pucula* I 369, *immubilis* O 53, *cognuscere* R 103, *suspis* S 442, *lurica* T 169.

u for *ŏ*:[3] *accula* A 102, *cognitur* C 574, *curtina* 596, *superinspectur* E 106, *interpulavit* I 342, *balneatur* M 78, 79. So frequently nouns in *-tor*, which Schuchardt claims had *ŏ* "vulgärlateinisch." *obturpuit* O 49, *pulluta* P 427.

i for *ē*: *acidia* A 91, *vinditio vindunt* 429. (Schuchardt[4] compares wal. *vinde*, sizil. *vinniri*) *bisteis* B 69 (cf. It. *biscia*), *biluae* 99, and P 239, *delivit* D 108, *disperatus* 183, *disidem* 185, *fistinanter* P 135, *filicitas* 494, *criscet* 364, *signities* S 193, *signes* 196.

i for *ĕ*:[5] *inergumina* I 169,[6] *innomirum*, *innomirabilem* 282, *numirus* M 20, *nimpe* N 92, *quatinus* Q 2, Cf. Festus 258, *quatenus significat qua fine, at quatinus quoniam.*

e for *ī*:[7] *fermandi* Q 43 (cf. Fr. *fermer*) *ceccum* C 217. Gröber, Archiv für Lat. Lex., I. 545, shows that Span. *chico*, Fr. *chiche*, It. *cica*, prove the *i* to be long.

e for *ĭ*:[8] *proicet* A 13, *tollet* 25, *abluet* 51, and so frequently in the 3d pers. sing.: *addedit* 108, *adepiscitur* 110, *semile* 144, *vectimae* 198, *vicessim* 216, *aletus* 237, *engens* B 122 (cf. Fr. *engen* < *ingenium*), *minester* C 40, P 43, S 53, *spessavit* C 266 (cf. It. *spesso*) *sinester* S 114, *pegritia* 198.

Prosthetic *i*[9] is seen in I 407 *istromates* and 416 *istromatheas* = *stromateus*. I inserted L 133 *linchine*[10] = *lychni*.

Examples of *ae* for *e*, and *e* or *ę* for *ae* will be found on every page.

a for *au*:[11] *agusta*, *agustum*, *agustorum*, *agustius* A 184–187, *actius* A 96, *cadices* C 119, *ladis* F 1, *lade* H 63. Cf *latomus* L 61, and Saalfeld, Tensaurus *lautumiae*. Perhaps *caudalocus* = *catalogus* C 62 may be regarded as an instance of "Umgekehrte Schreibung."

Other phonetic peculiarities will be touched upon in the notes. I will only mention here as deserving attention, if my reading is correct, a single case of *ie* for *ĕ* for *ĭ*:[12] *biviera* for *bivira* B 101. In Plautus Mss. *veri* and

[1] Cf. Schuchardt, II. 355; Isid. Or. XII. 1, 25: "*porcus* quasi *spurcus* (Var. *sporcus*).

[2] Cf. Seelmann, 214; Schuchardt, II. 91 ff.

[3] Cf. Seelmann, 211 f.; Schuchardt, II. 101.

[4] Cf. Schuchardt, I. 343 f.; Seelmann, 189 f.

[5] Cf. Seelmann, 183, 186.

[6] Cf. Schuchardt, III. 140.

[7] Cf. Seelmann, 191.

[8] Cf. Seelmann, 200.

[9] Cf. Seelmann, 317.

[10] Cf. Schuchardt, II. 410, and Saalfeld, Tensaurus.

[11] Cf. Schuchardt, II. 306–320; Seelmann, 223.

[12] Cf. Schuchardt, II. 332 f.

vero are frequently found for *viri* and *viro* (cf. Loewe, Prod., p. 75). Compare Fr. *fier, miel, fiel,* from *ferum, mel, fel.*

To inspire respect for the miscellaneous contents of these glossaries, it is only necessary to show that many of the unusual words and forms found in them go back to the most excellent sources. This I shall endeavor to do by a few illustrations taken from the Sangallensis.

nis : nobis N 86. Neither Loewe nor De Vit in his Glossarium cites this gloss, although doubtless it will be found in other glossaries. The only other evidence for the existence of a form *nis* is a remark of Paulus under the world *calim* 47, "Antiqui dicebant pro *clam*, ut *nis* pro *nobis*, *sam* pro *suam*, *im* pro *eum*."

anxati : vocati nominati A 276. Compare with this Paulus 8, *axare : nominare. Axare* seems to be required by *axamenta* Paulus 3, and the derivation from the root seen in *negare, adagium.* But, as Mueller remarks, the alphabetical order seems to require *anxare*, standing, as it does, between *antarium* and *antipagmenta.* See also Gloss. Labb. *anaxant : ὀνομάζουσιν.* De Vit gives a gloss *anxiati : nominatim vocati.*

exanclare : exaurire E 287. Compare Paulus 80, *exanclare : exhaurire.* Placidus 38, *exanclare, exhaurire, a Graeco veniens, quod quidem verbum Plautus, saecularis poeta comicus posuit in Sticho :* "ne iste edepol vinum poculo pauxillulo saepe exanclavit."

oppidanus : civis ex oppida nam oppidaneus Latinum est, apud antiquos oppida dicta sunt quod opem dare (nt) O 131. Paulus 203, *oppidum dictum est quod opem praebet.* The *dare*, however, is as much a part of the etymology as *opem ;* and so Festus 202, quoting from Cicero de Gloria, has "quod *opem darent.*" This is lost in the *praebet* of Paulus. Other explanations are given by Varro, L. L., V. 32, and Servius ad Æn. IX. 608.

remilus : repando R 73. Compare Paulus 276, *remillum dicitur quasi repandum.*

sarissa : genus teli Macidonici S 36. Festus 318, *Sarissa est hastae Macedonicae genus.*

sucerda : stercus uvile S 378. Paulus 303, *Sucerda stercus suillum*, etc. To make sense, *uvile* should be emended to *suillum* (*suile* ?) An easier emendation, however, is *ovile* (*u* for *o*, cf. *opilio* and *upilio*). And as, according to the conjecture of Mueller Festus 302, Verrius Flaccus must have treated of *ovicerda* = *stercus ovile* in the same connection, *ovile* may have arisen from some confusion of two glosses.

tagax : forunculus T 3. Festus 359 *Tagax furunculus a tangendo cuius vocabuli Lucilius meminit* "et mutonis manum perscribere posse tagem." (*tagacem* Paulus). Goetz Rheinisches Museum Bd. XL. p. 327 cites from Vaticanus (1469) "*tagax : fugax*" where *furax* is to be written. Cf. Loewe Prod. p. 317.

nusciosus : qui plus vepere videt N 133, is a corrupt remnant of what

is found in Paulus 171. *Nusciciosus, qui parum videt propter vitium oculorum, quique plus videt vesperi, quam meridie.* From the fuller statement of Festus 173, we learn that Aelius Stilo explained the word thus, *qui plus videret vesperi, quam meridie, nec cognosceret, nisi quod usque ad oculos admovisset.* Cf. Loewe Prod. pp. 17 and 121.

lixa: aqua dicebant antiqui unde elixare dicitur L 148. Compare Nonius Marcellus p. 62, *lixam namque aquam veteres vocaverunt, unde elixum dicimus aqua coctum;* and p. 48, *elixum quicquid ex aqua mollitur vel decoquitur nam lixem aquam veteres dixerunt.* In the latter passage Quicherat reads *lixem* with the Mss., but in the former against the Mss. corrects *lixam* to *lixem.* The evidence of the glossaries, as Loewe points out (Prod. p. 404), would rather favor the correction of *lixem* to *lixam.* The gloss, while not derived from Nonius directly, may go back to the same source.

alcitellus: alte evocatus A 256, *altellus: terra nutritus* 258 (not *terrae*, as Loewe reads Prod. p. 12, where other forms of this gloss are given). *Altellus* as a surname of Romulus is known to us only from Paulus 7. Whether the form *alcitellus* is anything more than a corruption, it would be difficult to say. It has some support in *acitella*, Frag. Vindob. 2404 (Loewe l. c.).

exaustant: exauriunt E 234, confirms Paulus 82, *exhaustant: efferunt.* Although the lexica furnish no example of this verb, we may be sure that this exact form occurred.

taura: sterelis T 17, is an example of a gloss reduced to its lowest terms. Compare Paulus 353. *Tauras vaccas steriles dici existimatur hac de causa, quod non magis pariant quam tauri*, see also Festus 352.

aeneatores: corno vel calamo cantates A 163, contains, with slight emendation, the same information as Paulus 20, *aeneatores: cornicines dicuntur, id est cornu canentes.*

ceccum: cortex maligranati C 217. Paulus 42, *Ciccum membrana tenuis malorum punicorum.* For a full discussion of this gloss see Loewe Prod. p. 274.

bibinare: inquinare sanguine muliebri minstruum B 154. The alphabetic order requires *bubinare.* Paulus 32, *Bubinare est menstruo mulierum sanguine inquinari.* Lucilius: "Haec" inquit "te imbubinat, at contra te imbulbitat." Placidus p. 13, *bibinare, sanguine inquinare. Inquinare* should be read in Paulus, cf. Loewe Prod. pp. 250 and 313 f.

campae: equi marini C 17. Paulus 44, *Cappas marinos equos Graeci a flexu posteriorum partium appellant.* If we compare *Hippocampi, equi marini, a flexu caudarum, quae piscosae sunt*, Nonius p. 120, we can hardly doubt that *campas* should be read for *cappas.*

carisa: faba C 69. Paulus 44, *Carissam apud Lucilium vafram significat.* Hence for *faba* we must read *vafra.* According to Loewe Glossae Nominum, p. 150, Codex Casinensis 439[5] has *carissa: paba.* For fuller glosses of this word see Prod. p. 304.

For other glosses which go back to equally good ancient sources, see the notes on *abellum* A 11, *acerlis* 82, *alux* 224, *arceria* 361, *bispillus* B 106, *boa* 121, *camuribus* C 22, *cannar* 116 and 44, *ceritus* 234, *cocula* 341, *compernens* 402, *gentiunt* G 49, *hostit* H 124, *hostimentum* 128, *intercapito* I 352, *investis* 384, *macilentus* M 30, *mapalia* 33, *metacastor* 80, *lapite* L 60, *opniparum* O 154, *saccella* S 12, *taxat* T 7, *trabica* 23, *transtres* 24, *tragula* 27, *tesqua* 88, *tybicines* 112, *vola* V 146.

Sometimes it is possible to refer a word glossed with more or less probability to a definite author.

Thus A 287 and 288, *anfracta: intertortuosa, anfracta: et difficilia* undoubtedly refer to a passage quoted by Varro, L. L. VII. 15, and after him more fully by Nonius, p. 192, from the Eurysaces of Attius, —

Super Óceani stagna álta patris
Terrárum anfracta revísam.

Varro's explanation is somewhat different, *anfractum est flexum, ab origine duplici dictum, ab ambitu et frangendo.*

A 157, *aetatula: aetate modica*, shows that the gloss refers to some passage where the word occurred in the ablative. Such a passage is quoted by Aulus Gellius II. 23, 10, from Caecilius, *Quis vestrarum fuit integra aetatula?*

C 93, *caliotur: fallit*, corrupt for *calvitur*, which may go back to the Laws of the XII. Tables. "Si calvitur pedemve struit manum endoiacito," quoted by Festus 313. Placidus, p. 25, has *Calvitur, frustratur. decipit*, which more resembles the explanation of Nonius, p. 6. *Calvitur dictum est frustratur; tractum a calvis mimicis, quod sint omnibus frustratui.* Plautus in Casina (II. 2, 3)

Nam ubi domi sola sum
Sopor manus calvitur.

It is better, therefore, to refer the gloss to this passage. It is worthy of notice that Servius ad Æn. I. 720, explains *calvio* by *fallo*, "Alii *calvam*, quod corda amantum *calviat* id est *fallat* atque eludat." For other glosses see Prod. p. 366.

C 316, *circumfundimur: circumdamur.* No one can doubt that the reference here is to Verg. Æn. II. 383, —

Inruimus, densis et circumfundimur armis.

A 380, *ast ego: ego autem* probably refers to Æn. I. 46, —

Ast ego, quae divom incedo regina, Iovisque (cf. VII. 308),

in commenting on which Servius compares Sallust's use of *vos autem.*

A 220, *allabi: navigio duci* refers, I think, to Æn. III. 131, —

Et tandem antiquis Curetum adlabimur oris.

The form *adlabi* occurs Æn. X. 269.

A 248, *allavitur: leviter decurit* may refer to Æn. X. 292, —

Sed mare inoffensum crescenti adlabitur aestu.

C 382, *compotrix: sotia ad bibendum*, may refer to Terence, And. 232,

Quia compotrix eius est. di, date facultatem obsecro.

A 244, *aliorsum: altera in parte* may refer to Ter. Eun. I. 2, 2, where Donatus explains it *in aliam partem*. In a Terence glossary found in Cod. Vaticanus 1471, recently edited by Goetz, occurs *aliorsum: aliter dicit.*

Many other cases of this sort will be found in the notes. I will only call attention to *bobinatores* B 130, *bucones* 153, *catax* C 34, *cassibus* 52, *carinantes* 114, *calcitrones* 135, *conbibiones* 543, *consuetio* 553, *discerniculum* D 227, *libare* L 99, *perpexa* P 307, *persolla* 310, *senta* S 106, *serpit* 150, *semicem* 157, *subtemine* 353, *suffecet* 398, *tresoli* T 83, *tumulus* 196, *undantia* U 189.

Now, a good source having been established for so many of these glosses, it stands to reason that other rare and difficult words go back to equally good sources, although we may not be able to appeal to any ancient authority for their use. While the evidence of a glossary as corrupt in its orthography as the Sangallensis may be regarded as insufficient to establish a form or word otherwise unknown, the comparison of several related glossaries may enable us to arrive at the true form, and to assign to it its right meaning; and words thus established, if supported by good analogies, ought to be looked upon as the property of the language, and received into our dictionaries. A few examples will illustrate this.

helitores: ortolani (=*hortulani*) H 40. Loewe Prod., p. 339, cites four other glosses in support of *helitores*. Doubtless the word was contained in the fuller discussion of Verrius Flaccus, from which Paulus 100 has preserved "*Helus* et *helusa* antiqui dicebant, quod nunc *holus* et *holera*." In this case, therefore, we are not only certain of the form, but we can assign it to a very early period of the language. Plaut. Trin. 407, already uses *holitores*, and Placidus, p. 51, gives *Holitores*, *holerum distractores*.

dilargus: multum donans D 172. *Dilargus*, which according to Loewe Prod., p. 382, and Hildebrand, p. 105, is found in several glossaries, has already been received into the dictionaries of De Vit and Du Cange. It is supported by the use of *dilargiri*, although after the analogy of *deparcus* (Suetonius) we might rather have expected *delargus* as its opposite.

exumptuavi: pauper factus sum E 236 (cf. Hildebrand, p. 136, and Loewe Prod., p. 425, who also gives *exsumptuavit: pauperavit*). Both De Vit and Du Cange give *exsumptuare*, and the latter cites Baldricus

lib. I. Chr. Camerac, cap. 120, *Domesticos sane exsumptuabat locupletabat alienigenas.* Before assigning the word, however, to a late period, it will be well to remember that Lucilius uses *deargentare*, and Plautus has *expeculiatus.*

aequalentiae: semile (*similis*) *divisio* A 144. This word is doubtless of late origin. Du Cange defines it as "Divisio hereditatis vel bonorum per aequales partes," and gives several examples of its use.

baulat: latrat B 14, we might be inclined to emend to *baubat. Baubantur* occurs in Lucretius V. 1070, and Isidorus Diff., I. 607, gives *canis baubat vel latrat*, while Codex Casinensis 439 has *baubantur catuli* (cf. Loewe Glossae Nominum, p. 249); but in an onomatopoetic word the termination may easily vary. We may well compare the English *bawl*, of which the *baw* is the essential part, and Gr. βαύζειν. According to Du Cange, Ugutio, in giving the names for the cries of different animals, has "Canum latrare seu baulare." Du Cange and Diefenbach both recognize *baulare.*

abiuga: a iugo semota vel dissociata A 18 seems to prove the existence of an adjective *abiugus.* De Vit cites a gloss *Abiugus:* θυσίαι, ζώγεαι, which must be compared with *abiuges hostiae: iugum non expertae* also given by Du Cange. So we have both *biiugus* and *biiugis*, *quadriiugus* and *quadriiugis.* Vergil speaks of such *hostiae* in Georg. IV. 540, as *intacta cervice iuvencas.* Cf. Ovid Met. III. 12, *bos—nullum passa iugum.*

omnopere: omni virtute O 111, also found in Ambr. B 31 (cf. Loewe Glossae Nominum, p. 168). *Omnopere* is formed regularly after the analogy of *tantopere*, *magnopere.*

elapidavit: distruxit E 40. Pliny uses *elapidatus* = freed from stones. Hildebrand, p. 134, gives this gloss, *expilat, occulte exterminat vel elapidat. Dilapidet* in Terence Phorm. v. 8, 4, is explained by Donatus as *disperdat.*

bidendo: fodio B 94 (cf. Du Cange under *bidendare* and *bidentare*). The substantive *bidentatio* shows that there must have been a verb *bidento*, although it seems not to occur in any author.

cinnus: tortio oris, unde dictus est cicinnus C 327. Loewe gives in addition the following glosses, Prod., p. 393: *cinnus: torti oris; cinnus: tortio oris; cinus: torciores inde cinnus; cinos: tortiones indecentes* (corruption for *cinnus: tortio oris; inde cincinnus*). He conjectures that the full gloss once read *cinnus: tortio oris, inde dictus est cincinnus* [*tortus capillus*], and that we may explain *Cinna* as *homo torti oris.* Furthermore he cites *cinnus: nutus; cinnus:* νεῦμα (gloss. Philoxeni, p. 38, 29); *nutu: voluntate sive cinno vel aspectu; nictare: cinnum facere, id est oculo annuere; cinnavit: innuit promisit.* Nothing could illustrate better the assistance to be derived from a comparison of many glossaries. No one can doubt the existence of *cinnus*, at least in vulgar Latin,—and Gröber Archiv I. 545, without referring to the proof of Loewe,

posits *cĭnnum* in sense of "Stirnrunzeln, Winken nach: span. *ceño*, aspan. *aceñar* winken, port. *cenho*, prov. *cenn-ar*, winken, afrz. *cener*, *acener*, rät. *cin*, Wink, ital. *cenno*, *acennare*."

For other new, rare, or difficult words, some of which still wait for a satisfactory explanation, see the following glosses with their notes: —

acrore A 94, *recertatur* 279, *intertortuosa* 287, *belligeratores* B 71, *castalitati* C 43, *carpacus* 75, *canier* 115, *recrastinatio* 395, *conlibiscet* 480, *conclasare* 504, *abinvicem* 623, *desitescere* D 48, *verruculatus* D 132, *divale* 190, *discipulati* 210, *dispernit* 244, *diplumatarius* 249, *extestinum* E 286, *eloquus* F 2, *fassiloquax* 18, *famicus* 48, *favisio* 62, *furfuraculum* 241, *gastromargia* G 15, *grumat* 82, *glevo* 87, *hestispicus* H 36, *heculaneus* 51, *iacturarius* I 10, *impopulavile* 66, *insuetare* 307, *interminia* 360, *daemoniosa* L 5, *leptopyria* 90, *manicat* M 23, *mermis* 76, *minsare* 95, *monachosmum* 127, *musitanter* 173, *musia* 174, *mutturci* 181, *olitana* O 105, *gravosum* 124, *oridurius* 166, *pactorium* P 7, *parasituli* 33, *panera* 67, *prestigiaverunt* 139, *deambulatorium* 238, *imaginarie* 253, *pergenuat* 270, *persum* 271, *clustellum* 312, *ramen* R 18, *refoculat* 52, *ronannis* 168, *rustu*, 192, *sarga* S 35, *saures* 45, *sconna* 311, *scrupulatur* 388, *superaria* 415, *taria* T 6, *pertusorium* V 74, *vicissitur* 97, *unicuba* 197, *ypinx* Y 8.

Finally, I wish to illustrate by a few examples the value which these glossaries have for the student of late and vulgar Latin. In the interpretations one may find many words which were unknown in the classical period, or which were used in a different sense. In some cases it may be assumed that the correct classical word had fallen into disuse, and that the word used in the interpretation was ordinarily employed in its place. Compare with C 175 *cliens: susceptus*, what Servius says, ad Æn. VI. 609, "*clientium* quos nunc *susceptos* vocamus."

Rönsch, Itala and Vulgata, p. 334, gives a great many instances of *modicus* = "klein, gering, unbedeutend," and says "*modicus* in dieser Bedeutung ist ein fast nie fehlendes Charakteristicum der Itala und Volkssprache welches nur hier und da durch *pusillus* sich ersetzt findet." Loewe Prod., p. 414, ff. gives twenty-seven examples from glossaries, only one of which is cited from the Sangallensis, although some from the Cod. Amplonianus are identical with those found in our glossary. I have collected twenty examples.

A 157 *aetatula: aetate modica.*
A 233 *allec: pisciculus modicus.*
C 221 *cercilus: navicula modica.*
C 613 *cumba: navicula modica.*
E 75 *emuniles: modice eminentibus.*

F 202 *frusta: particula modica.*
L 137 *linter: navicula modica.*
M 62 *meliusculum: modicum meliorem.*
M 160 *munusculum: modica donatio.*
N 55 *nequiquam: nec modicum.*
P 14 *pauxillum: paulolum modicum.*
P 87 *papiliones: tenturia modica.*
P 167 *prelus: modicus.*
P 326 *pixides: vasa modica*, etc.
Q 7 *quantolum: modicum.*
Q 42 *quiddam: modicum aliquid.*
Q 47 *quippiam: aliquid modicum.*
S 73 *scafa: navicula modica.*
S 140 *sensim: paulatim modice.*
V 129 *virguncula: virgo modica.*

The frequent use of *minutus* for *parvus* in Cassius Felix has been noticed by Wölfflin. Cf. "Ueber die Latinität des Afrikaners Cassius Felix," Berichte d. bayer. Akad. der Wissenschaften, 1880, p. 403. I have noted the following instances of *minutus* thus used: —

C 210 *caementum: minidorum lapidum congregatio.*
D 270 *dispicatis: minutis partibus.*
L 90 *leptopyria: minute febris.*
M 107 *migma: palea minutarum.*
Q 45 *quisquilias: paleas minutissimas.*
V 105 *vipurna: silva minuta.*
V 110 *virecta: loca quaevis sint in agris arboribus minutis frondentibus.*
V 114 *virgulta: silva minuta.*

Summitas, according to Krebs-Allgayer, Antibarbarus, is late Latin for *altitudo*, *cacumen*, *fastigium*. De Vit cites several passages from the Vulgate. Compare the following glosses: —

C 82 *cacumen: summitas.*
C 265 *crebido: rima summita.*
C 594 *culmmen: summitas.*
C 612 *cuspis: summitas aste.*
D 77 *de vertice: de summitate.*
I 24 *iuga: capita et summitatis montium.*
S 64 *scabum: summitas cacumen.*
V 79 *vertex: summitas capitis et cacumen montis.*

Of *circumquaque* the Antibarbarus says "spät Latein und nur einmal kommt *circumquaque* vor für *circum*." Other examples, however, will be found in Georges and in Paucker, Supplementum Lexicorum Latinorum. Compare C 300, *circumquaque: undique*, and C 500, *conlustrare: cir-*

cumquaque conspiciens. The word occurs in a Latin hymn of the eleventh century. (Cf. Mélanges Lat. et bas-Latins, par A. Boucherie, Montpellier, 1875, p. 34), —

Salve tu, inclita,
Circumquaque septa
Clusione mirifica! Deus.

The fact that in the Romance languages *ferre* was supplanted by *portare* makes the following glosses significant: —

A 372 *armiger: armiportatur.*
B 106 *bispillus: ubi mortuos portant* (Paulus 369 *efferunt*)
D 115 *devectus: deportatus.*
E 144 *evehit: transportat.*
F 111 *ferunt: portant.*
F 112 *feretrum: lectus in quo mortui portantur.*
(Cf. Varro L. L. v. 167, *ubi lectus mortui fertur*, and Servius ad Æn. XI. 64, locus ubi mortui *feruntur.*)
F 179 *fosforus: lucem portans.*
G 46 *gestat: portat.*
I 392 *invehit: infert portat.*
I 397 *invectus: inportatus.*
L 35 *latur: portatur.*
L 44 *laurigeris: laurum portantes.*
L 71 *lectica: qua consoles portantur.*
R 65 *relatum: reportatum.*
R 67 *regerit: reportat.*
R 126 *revehit: reportat.*
R 135 *revicta: reportata.*
S 32 *sandapila: ubi portantur gladiatoris.*
S 190 *signifer: qui signum portat in bello.*
V 36 *vectitat: frequenter portat.*
V 41 *vehiculum: iumentum, carrum vel omnem quod a portandum utilem est.*
V 42 *vehit: portat.*
V 45 *vectus: portatus.*

S 279 *stricto pungione* (*pugione*): *evaginato glatio* (*gladio*). The same gloss is given by Loewe Prod., p. 106, from Cod. Leidensis 67 F[1]. Suetonius uses *strictis pugionibus*, Julius Cæsar c. 82. *Evaginare* seems to be vulgar and late. *Evaginato gladio* is found in the Vulgate, Mark xiv. 47, Acts xvi. 27. See Georges and Rönsch p. 190. Add Hegesippus I. 28, 3, IV. 30, and Ambrosius de fide III. 125. (Cf. Romanische Forschungen I. 271 and 415.)

G 12 *garrit: verbosatur.* The verb *verbosari* belongs to ecclesiastical Latin. See examples in Rönsch Itala und Vulgata, p. 171, and compare

especially Augustin. Serm. 251, "in ecclesia *garriunt*, ita *verbosantur* ut lectiones divinas nec ipsae audiant."

D 140 *deverticulum: ubi camsatur.* Compare D 250 *diverticolum: quod brevi loco divertitur.* The verb *camsare* in the one gloss takes the place of *dĭ-* = *devertere* in the other. Ennius wrote *Leucatam campsant* (cf. Priscian K. I. p. 541, where DH have *camsant*) in place of which Cicero ad Att. V. 9, uses *Leucatem flectere.* The word, however, seems to have continued in the vulgar idiom. I quote Du Cange. "*Camsare, Flectere iter* in Glossar. Vatican. sec. XI. ap. Maium Classic. auct. tom. 7, p. 534; *plectere iter* in cod. reg. 7644; *Item flectere* in Papiae cod. 7609. Regula Magistri c. 56, 'Cum fratres spiritales sine laico ambulant iuncti ad se, *campsantes* modice de via, flectant genua.' Hinc *cansare* pro *cedere, locum dare, flectere, deflectere*, apud Dantem Infer. can. 12, in Purgat. can. 15, et Matth. Villaneum lib. 1, c. 1."

L 58 *latibulum: defensaculum,* — Neither Harpers' nor De Vit gives *defensaculum;* but it is used by Servius ad Verg. ecl. VII. 6; Augustinus ep. 102, 35, and ps. 67, 21, umbra ista *defensaculum* intelligitur, etc. Vulgar forms in *-aculum* must have been very common. See Rönsch p. 37 f.

To the examples of *pos* given by Loewe Glossae Nominum p. 210 f. and Prod. p. 137, may be added—

D 105 *denique: pos modum, deinde.*
P 263 *perendie: pus cras.*
R 129 *revinxit: pos tergum ligavit.*

For the use of *sero* in sense of *vesper* (cf. fr. *soir*, it. *sera*) we have interesting testimony in H 62 *hesperus: stella quę primos sero apparit.* See Wölfflin, ueber die Latinität des Cassius Felix p. 396.

In the same article Wölfflin, p. 410, says: "*Saepe*, welches in den romanischen Sprachen verloren gegangen und in Italiänischen durch *sovente* (*subinde*, frnz. *souvent*), *spesso*, *frequentemente* ersetzt worden ist, findet sich zwar bei Caelius ziemlich häufig, verhältnissmässig selten dagegen bei Cassius, nämlich nur 179, 16. und in den Formeln *saepe memoratus* 37, 8, und *ut saepe dixi* 38, 7, wogegen sich die längern Formen *saepius* und *saepissime* leichter behauptet haben. Das absterbende *saepe* wird bei Cassius mehr als unterstützt durch das etwa 70 mal gebrauchte *frequenter*, ein Missverhältniss, welches um so mehr auffällt, wenn man sich erinnert dass *frequenter* ein von Cäsar, Sallust und mehreren andern Autoren der guten Zeit nicht verwendetes Wort ist," etc., (cf. Archiv. I. p. 4). From this point of view the following glosses will be found interesting:—

C 264 *crebo* (=*crebro*): *spissum, subinde.*
C 124 *capessere: capere, invadere frequenter* (Servius ad Æn. I. 77, *saepe capere*).

D 203 *dictitat: frequenter dicit.*
F 8 *factitat: frequenter facio.*
F 12 *facesso: ——— frequenter facio.*
I 10 *iacturarius: qui frequenter patitur damnum*, etc.
I 105 *imperitat: frequenter imperat.*
I 370 *interdum: frequenter.*
M 103 *missitat: frequenter mittit.*
M 177 *musitat: frequenter murmurat.*
P 43 *parentat: umbris vel tumulis mortuorum frequenter paret*, etc.
P 257 *perpesitius: qui frequenter aliquem patitur.*
P 379 *potitur: frequenter utitur vel fruitur.*
V 16 *valetuderius: qui frequenter egrotat.*
V 36 *vectitat: frequenter portat.*

The positive *saepe* occurs only once, P 146; pressant: sepe precedunt; *saepius* occurs four times, —

C 159 *clamitat: sepius clamat.*
M 95 *minsare: sepius mingere.*
O 82 *occursat: saepius occurrit.*
R 156 *rogitat: saepius rogat.*

Assidue occurs M 88 *minitatur: assidue minatur.*

One would suppose that in the definition of "verba frequentativa" a writer might be tempted by the etymology to use *frequenter*, even if elsewhere he used *saepe*. It is worthy of notice, therefore, that of the Grammarians included by Keil, who treat of frequentatives, *saepe* is used by Servius (IV. 413), Pompeius (V. 220), Macrobius (V. 626), and Sergius (Anecd. Hel. 152); *saepius* by Charisius (I. 255), and Diomedes (I. 344); *frequenter* by Cledonius (V. 16), and Augustinus (V. 516); while the Commentum Einsiedlense has, p. 207, *saepe lego;* p. 253, quod *crebro* fit ut *lectito, saepe lego*; and on the same page, *volitat, frequenter volat.* Verrius Flaccus undoubtedly used *saepe* in conformity with the usage of his time, and this is preserved in Festus and Paulus. See under *adnictat, abnutare, auditavi, futare* (here *saepius*), *mantare, meritavere, obsonitavere, ostentas, occisitantur, quassare.*

A profitable treatment of syntactical usage could hardly be based on a single glossary, and I shall not undertake it here. Many mistakes that appear are doubtless due to the sheer carelessness of scribes. Others represent laxity of usage in the language as actually spoken at the time when the glossary was written, or even at some earlier period. Thus we find *sine dubium* P 440, N 94, and Q 46; *sine consilium* E 201; *sine spem* E 241; *sine sensum* F 32; *sine barbas* I 62; *de adulterium* N 111; *ex intervallum* E 195; *ex*

totum P 306; *ex matrem nubilem* S 428; *de quo scribitur* S 257 (instrumental for the simple ablative; cf. Rönsch Itala und Vulgata p. 393); *cum ventum* N 78; *cum III pedes* T 129; *per manu* M 23; *per otio* U 23; *ad pugna* M 28; *ad gloria* P 63; *ante sole* A 435; *ante luce* L 170; *post captivitate* P 394; *in unum volumine* C 525; *qui in provintia proficiscunt* P 43; *circa uva* T 153; *sine arma* I 164; *sine effectum* I 401; *incircumscriptus: terminum carens* I 133. Compare Rönsch Itala und Vulgata, pp. 406–412 and 414.

Enough illustrations have I trust been given to show the extreme value of these glossaries for the study of Latin in its earlier and later periods. Many others under each category will be found in the notes. Romance scholars will doubtless find many forms and orthographical peculiarities of interest on which I have failed to comment. A very interesting example is furnished by V 82, *Vernum: prima vir* (= *ver*). We have here apparently a forerunner of the Italian *primavera.* Not until, however, a great many of these glossaries have been edited can the best results be realized, and the gain may be expected to be almost as great for the Romance languages as for the study of Latin.

AN OLD LATIN GLOSSARY.

Codex Sangallensis 912.

P. 4. Abba: pater
ababus: tritavi pater
abacta: immolata
abactus: ab acto remotus
5 abantes: mortui
abaso: infirma domus
abest: deest
abit: discedit
aberunca: abstirpat
10 abemcat: eradicat
abellum: agnus recens natus
abiit: discessit
abicit: proicet, minat
abigeius: qui tolleremaliena
15 P. 5. abitudo: abitus corporis vel vestitus
abiucassere: disiungere
abiungere: dissociare
abiuga: a iugo semota vel dissociata
abissus: profundum
20 abiungit: seiungit
abincursu: ab inpugnationē
abingruentis: abinmittentis
abiurat: negat
abita: insatiata
25 abolet: tollet
abolere: dememoria excludere
aborreas: manatio
abonat: repudiat
aboris: a finibus vel ab initiis
30 abolitio: res semota et oblivione perducta
P. 6. aborsus: ab eo quod est ordior
abortus: ex eo quod est orior
aborrit: dissonat, discrepat
abunde: satis
35 abunda: panici et millei follicoli
abusive: abuso tracta
abusi: male usi
abluta: diligenter lota
abusitatus: minus instructus scientia
40 aboditur: recusat
abdixit: ammovit
abligurire: plurima consumere id suspensis degitis leviaescebum tangere
abnegat: plusquam negat
abstans: distans
45 abrepticius: furiosus
P. 7. absono: non simili sono
abdicat: a re alienat
ablutum: absconsum
abdidit: occultavit
50 abgreco: reparo et egreco
abluet: emundat
ablegatur: condemnatur
abnuit: rennuit
abniso: nolo, veto
55 abnenepus: qui nascitur de pronepote
abrogans: humiles
abrogare: lege tollere
abstrusa: abscondida
abstemius: sobrius
60 absistit: loge est
P. 8. absurdum: turpe, duuium
absque foedere: sine amicidia
abstote: recedite, abite
absedeto: longe sedeto
65 abtra: folia vitae
abricum: locus temperativus sine rigore
abset: longe
acapis: caritas
acapitus: dilectus
70 acathe: genus lapidis
acantes: genus floris quo vestes inficiuntur
acentus: sonu vocis coreptae vel productae
P. 9. acevitas: crudelitas
acervuus: tumulus
75 acerbum: inmaturum
acceptatur: auctor, conscriptur
accersit: vocat
acer: durus
acertio: vocatio
80 acero: flubius aput inferus
atenus: usque nunc
acerlis: securis quam flaminei subpontificis habebant
acersa: arculatoreania
accevat: condessat, constipat, quoadunat
85 achademicus: phylosophus
achademia: locus ubi Plato tractavat
P. 10. acrimonia: sevitia
acidiatur: stomachatur
acie: turba
90 aciem: ocolorum aut vim ferri
acidia: tędium animi
accitur: advocatur
accito: evocato
acidus: ab acrore
95 acepitrem: aceptore
actius: amplius uberis
aconito: genus veneni
acononitus: qui nulli communicat
acroceria: ligatura articolorum
100 hic acinus: et huacini generis masculi
P. 11. acuum: diathema
accula: qui aliena terra colit
a colmine: ab alto
actutom est: statim, confestim
105 actuarius: acta qui facit
adeas: accedas

adonai: dominus significans
addedit: intolit
adeptus: consecutus
110 adepiscitur: consquitur
adèst: presto est
adesto: auxiliare
addida: adiucta
adero: auxiliabor vel occorro
115 P. 12. adulta: matura
adnectens: nodans vel ligans
adserens: disputans, adfirmá
adsertio: disputatio
adsertor: confirmator
120 adseverat: adfirmat
adminiculum: auxilium, adiutorium
adnixa: innotata, adiucnta
adtonitus: intentus
adstipulatus: adiucntus
125 adstipulatos: idoneus testes
adstipulatio: professio
adstipulatione: adsponsione
adfinis: proximus
P. 13. adluricum: res ad lumen apta
130 ad summum: ad novissimum aut ad primum
aephyphama: apparatio, ostensio
aelam: porticum
aeden: dilitias
aemolo: invido
135 aemolus: imitatur
aemola: imitatrix seu adversa
aemolatio: zelus, contentio, invidia
aestuat: anxiat
aestus: calor
140 aemolumentum: locrum vel quęstum
ęquiperat: ęquant, conpensant, semilant
ęquargentus: am
P. 14. aequae: iustae
aequalentiae: semiledivisio
145 aequora: maria ab aequalitate
aequora: campi
aestus: calor
aevum: aestas vel tempus
aevo gravis: sexus vel aetate infirmus
150 aevitas: aetas
aeternum: perenne, perpetuo
aer: inter caelum et terra
aerarium: tesaurum
aestu: turbatione, calore
155 aethra: rota cęli
aethon: aquila
aetatula: aetate modica
aenenitores: tui cenes
aeneade: coniuratio
160 aequevus: unius ętatis
P. 15. aethera cálestia vel possesio caeliignea
aercolus: genus arboris
aeneatores: corno vel calamo cantates
Aeneades: Romam vel Troiam
165 aeviterum: aeternum
aefunnę: aestimationis
aerumna: labori nopia
aes: ęramentum
aeneum: aereum
170 aepos: versus
aedituus: custus domorum et templorum
afrodin: spumam sanguinis gerante
afficior: tedium padior
a fectum: studium
175 adfectio: voluntas
affatim: abundanter
apthas: oris ulceratio
P. 16. affatibus: allocutionibus
afuit: defuit
180 affluentia: habundantia
aformas: occasionis
agios: sanctus scs
agaso: domesticus
agusta: pulchra vel sancta
185 agustum: amplificum
agustorum: sanctorum
agustius: magnificentius
agrestis: rusticus vel ferus
agmen: multituto
190 agone: pugna, certamen
agutus: velox, agilis
agacula: lenocinatur
agricola: colonus
agason: minester officialis
195 agaron: qui negotia aliena anteambolat
P. 17. Agrippa: qui in pedibus nascitur
agnati: liberi qui per adobtione veniunt in tantum d cognati, adfinis
agoniae: hostiae, vectimae
agonitheta: qui ipse est in bello
200 agonia: alacritas, amor vel vigor
Agracas: nomen montis in Sicilia
agiographa: sancta scriptura
agonita: herba venenaria
aggeres: terre congeries
205 aggerat: congregat
agon: certamen
ait: dicit
ais: dicis
aio: dico
210 aisti: dixisti
ain: ergo
Alcides: Hercules a virtute appellatus, alce grece virtus dicit
alioquin: nam si non
P. 18. alacer: laetus, gaudens, expedī
215 algor: frigus
alternantim: vicessim
alternanti: duvitanti
alabastrum: genus marmoris pretioso
allabione: inundatione *aquarum*
220 allabi: navicio duci
alogia: convivium grece

allicula: genus vestis
alucinatio: lucis alienatio
alux: pollex in pede
225 alfeus: deus marinus
alma: virgo sancta, Hebreum est
aalma: virgo
alites: volocres
altilia: studiosaginata
230 altilia: volatilia
alatis: pinnatis
altercatur: litigat, obiurgat
allec: pisciculus ex mare modicus aptusatium liquuminibus
P. 19. alveus: profundus vel torrens
235 alvus: venter
aletus: nutritus
aliendum: nutriendu
alleluia: laudate dominum
alias: aliter
240 altricem. nutricem
allectu: electum
alienigena: alterius generis
alumnus: quem quis aluit, id est nutritus
aliorsum: altera in parte
245 alea: ludum, tabulae a quodam mago alea nomine qui hoc adinvenit lusum
alimentum: nutrimentum
alnum: lignum agnetano idest vernum
allavitur: leviter decurit
alligorit: aliud pro aliod significans similidudo id est
250 altrinsecus: abinvicem, hinc et inde
aliquantisper: aliquandiu
ala: pars multitudinis exercitus
alacres: cavallares
alebre: polchrum, bene educatum,
255 *allubione: quae ripis aquarum pē . . . ex alia parte aderiscent arenas*
P. 20. alcitellus: alte evocatus
altibuans: in alto, ex alto sonans
altellus: terra nutritus
albet: splendit
260 alacrimonia: laetitia
alteruter: alter et ambo
allectat: spectat
alit: nutrit
alimonia: aesca
265 alsosus: frigorosus
albus praetoris: ubi sunt conscripti qui recitandi sunt, tabū ē in albis litteris
altrix: nodrix
alvearia: vasa apium
alluvium: quotiens flumen alium sivi meatu facit
270 allapsus: sensim veniens
altematur: variator
Amen: fiat vel sive fideliter
ambrosiae: divinae pulchre
amoenum: dilictuvile, iocundum
275 P. 21. anquirit: inquirit
anxati: vocati, nominati
anxilites: aves volocres
ancurata: genus furiae
antaconista: recertatur
280 anethematus: abuminatus, perdidus
anxiferis: misteficis
antra: obscura loca
anget: praefugat, solicitat, stimulat
annuus: anniversarius
285 anniculus: unius anni
anquisit: valde scrutat vel quir??
anfracta: intertortuosa
anfracta: et difficilia
anasceve: adstructio
290 anathema: abuminatio
anarscis: mansionis, grę
antecellet: antecedet, praecellit
anethema: maranatha, prodicio in advento domini
P. 22. antitheta: aposita vel contraposita
295 annales: libri qui totius anni ordine continet
aoma: Rediaterra
aonii: populi
aona: circuitus, tractus, clima
apostolus: missus
300 apostata: refuga
apitiosus: calbus
aptet: impleat
aptam: congruam
aptamus: adiungimus
305 apex: distinctio notę aut summa pars teli vel cuiuscumque re
aperet: ostendit
apostrofat: transitum facit
apostēsis: constantes, animosi
aplistia: saturitas, crapulat
310 apocalypsis: revelatio
apodixen: ostensio, provatio vel exemplum
aperetos: sine febre
P. 23. apocrifa: recundita vel occulta
aplustria: navis ornamenta
315 apiternus: qui his rebus caret
apocrisis: depulsio
apoliterium: ubi ponuntur res labantio
appolit: vetat, proiget
apostrofa: conversio quando ad alias rem sobito commutatione facit
320 appedit: desiderat
arcanum: secretum
arcarius: dispensatur
arces: aedificia summa vel palata
arcis: luca summa muntium
325 arcitectus: qui domum tegit vel coperit
arbata: modiatrea
arcet: vetat, prohibet

arcire: repellere
arctus: stellae septemtrionalis vel situs in caelo
330 artus: membra, degita, noda
P. 24. arta: stricta, angusta
artat: stringet
arrogantes: aelatę
arrogantia: iactantia
335 arduus: altus, grevis
ara: altares
arva: terra, agrs et semenibus apta
arbiter: iudex aduobus electus
arvina: adeps vel axungia
340 arundine: canna vera vel calamum
arguet: increpat vel docet
artutim: membrati
arthemeticus: numerarius
aruntius: nomen stellae
345 Arcivi: Greci vel Mędi
ardalio: glutto
argi: simulagra
arupes: qui adara sacrificat
ariolu: vatis qui et fariolus
350 P. 25. area: ubi granum triturātur
argumentum: quod rei fidem dat
ardens: flagrans
ardetes: festinantes
aries: genus machinae ad expugnatio-nemurorum
355 arrepet: adpreendi
ariopagita: curialis
aripus: gladius falcatus
Arar: flubius Germanię
arbusta: vineae fructuosae rei
360 Argus: civitas Gręciae qūlevis
arceria: vas vinarium cum quo vinum ad aras ferebat
arx: emęnentissimus locus
arcera: plaustrum
arcessit: incusat
365 aruspices: qui intendunt signa corporis
arbitrerium: collegio arbitrorum multorum id est ipsa consensio ipsorum.
arguit: accusat
P. 26. armonia: conpetens coniunctio vel ex multis vocabolis aptę modolatio aut duplex sonus
Argolica: Greganiga
370 aridum: siccum
arentia: siccantia
armiger: armiportatur
arida: terra sicca vel sterelis
arcum: secretum vel incurvum aliquid
375 (a)quilicum: ventriculum
aquilum: fuscum, nigrum
astra: stellae
astrologus: aestimatur siderum et lunae cursus
ascemo: inunestus
380 astego: ego autem
asper: durus
aspernatur: contempnit, dispicet
astarium: ubi venduntur bona
asilum: locus confugientium
385 P. 27. asparagus: quia virgas habet asperas
asotus: luxuriosus
assem: quod unum dicimus
aspectare: voluptose intueri
aspirat: aflat
390 atnenses: ianitores
athomi: tenuissimi pulveris qui in radiis apparet solis et dividi non possunt
atra: nigra, tenebrosa
ater: niger
atrocē: amarus
395 atrox: crudelis, amarus, pessimus
atavus: proavi pater
atratus: locobris
athomus: indivisio
atrox: orrivilis
400 P. 28. atlum, athla: unumquoque opus palestricum quod ad victoria pertinet
atria: aedes
attollit: aggerat
atnepus: abnepotis filius, pronepotis nepus
atquin: adque ideo
405 aula: domus grecia
aulice: minester regis
auspicia: somnia
auspicei sunt: consecuti sunt
aucupat: capit
410 aucupatur: venatur
audet: ausus est
audacter: audaciter
audenter: confidenter
autumant: dicunt, aestimant
415 austri: nymbae, venti
P. 29. avitus: anticus
austeritas: amaritudo
avidus: avarus, copidus
augus: qui aves colliget
420 avia: extra via
avium: secretum avia
avellit: tollit
avulsa: subtracta
austa: putta
425 ausat: gustavat
aureax: neque solitarius
austrare: humidum facere
auctoritas: meritis aliquibus confirmata persona
aucturatio: vinditio, nam subauctoři est qui rem vindunt
430 auctoramentum: ipsa res vinditionis
auspicio: in avis nuntium quod in aves aspiciatur
augurium: signa avium volantium
P. 30. autionarius: qui emet
aurifodina: metallum

435 aurora : nubes rosea ante sole
auleum et aulea : straclum genus cortinę regalis
augustum venerbilisancto
avidium : antiquitus vel ababibus relictum
augustrius : sanctius, pulcrius
440 ausim : audeo
aucta : superposita
aurire : sumere, implere
auspicare : somnia inquirere
autio : puplica vinditio
445 auceps : avium venatur
avuncolus : frater matris
aunculus : magnus frater aviae
auriga : agitatur

B.

Bachum : vinum pro eo quia inventus est
bacht : sacrificat

P. 31. bachi : antiqui
bacatum : gemmis ornatum in modo bacarum
5 bacchatur : discurrit
batis : nomen serpentis
batus : aurora
bacchar : floris genus
baccanal : quod paganis agrarium Liberis patris dicebant
10 bacerus : baro factus
baligera : stulta vel bruda
Baccanalia : vacationis fures
bace : genus mulierum
baulat : latrat
15 bacapulus : in quo mortui efferuntur
bassas : oves
basum : non altum
basileus : rex
basilea : regina
20 P. 32. basilica : regula
basilicus : regolus
babil : confusio
bardus : stultus
babigera : stulta
25 barginę : peregrinę
blasto : cuvicularius
baccilatix : vinum
bacchatio : discursio, furor
baxem : quas buccellas dicunt
30 baratrum : gurgugite, fovea vel terrę hiatus
basilicus : serpens
balantes : oves
babtismum : lavacrum
barbitus : lyra maior sonus ut orcunum
35 bautride : vaccae
barduni : neptuniani
barbarostomus : homo qui barbarismis plenum profert verba
baltha : audax. Gothice
barcus : tardus, sine lingua
40 barriton : genus organi
P. 33. barnicum : aelefanti vox
balista : genus machinae unde excutiuntur sagitte
bassarides : vaccae
beat : beatum facit
45 beabo : beatum faciat
bariona : filius colombę
Bartholomeus : filiùs scs pendentes aquas
bravium : palma id est manus victoriae
bracata : caleata
50 brabeuta : qui palmas dat
blax : stupidus, insipiens
blattet : perstupitę loquitur
blapere : stopite et sine causa loqui
blatta : genus porporę
55 beati : filices
beatitas : beatitudo
belzebub : vir muscarum
benificus : benefactor
P. 34. *benivolus : benignus*
60 berillus : genus lapidis canditi
bellum : pugna
belligerat : pugnat
belliger : bellator
bellum civile : bellum domesticum quando una civitas inter se pugnat
65 betere : vade, proficiscere
Bel*f*ecor : simulacru Priapi
bellum navale : pugna in navibus mari
beto : avesq· in auspicio servatus
beluuri : bisteis marinis
70 Belide : abillo patre
Bessi : homines Tracie belligeratores
bestiarius : venatur bestiarum
Bellona : belligusa dea, belli dea inferiori
belos : gratiosus
75 bellicosus : pugnandi copidus est locus bellicosus
P. 35. beluae : bestiae
benivolentia : bona volontas
bre*f*otro*f*ium : locus venerabilis in quo infantes alontur
blenones : pudedi autercosi
80 blesus : qui aliosono corrupit litteras
benignus : satis bonus
bibliothica : ubi libri reconduntur
bibliopula : qui codicem vendit
bivulus : valde bevitur
85 biblum : funes denave ex buda facta
bialcis : nomen gigantis
biceps : duorum capitum
bicepiti : duplici
bicamus : qui duas habuit vel havit oxores
90 bicliniom : duas habet cellas
bicellium : quasi duas habet cellas

biblioticarius: qui codices resecat
bifarius: bilinguis
P. 36. bidendo: fodio
95 biditum: biforme
bipertitum: duabus partibus partitus
bidentis: oves
bilis: ira, comutio
biluae: bestiae marinae
100 bissui: sirico torto
biviera: secunda coniux vel quod duos habuit maritus
bifores: duplices ianuae
bilis: fel
bitire: ire
105 bigene: e duobus gentibus natum
bispillus: ubi mortuos portant
bimalcus: liber pater
bithalasum: peculum duarum navium
bimembres: centauri
110 Bitemon: nomen gigantes
P. 37. bisulcum: divisum ut ungulae
bivium: via duplex
bitet: vadit
bissam: corium bubolum
115 Briareus: gigans tentimanus
biti: proficisci
bimatur: doplatur
bipetalis: duorum pedum
bipertit: duobus erogat
120 bipennis: securis amazonica penum dicebant antiqui bis acuto
boa: sopor vehimens
boas: serpens engens et tumor in cruore suffusio sanguine
boriro: rubus, niger
Boreas: ventus Aquilo
125 borre: (*rasura*)
boare: damare, sonare, mugire
bona caduca: pecunia sine eredem
Borforus: transitus maris ponte in Asia
Bromiús: Liber pater
130 bobinatores: inconstanter
P. 38. bomus: sonus aut vox tumidus
brocca: labrosa
bolus: iactus
Boetes: Septemtrionalis stella comis
135 bombus: sonus
boatus: sonus vocis
boantes: strepentes, sonantes
boves Lucaniae: elefanti
buda: storia
140 bucula: vaccula
bumbum: sorbillum
busta: ignis
bumboso: sonoro furibudum
bustum: ubi homines comburuntur ad sepulturam mortuorum
145 buceta: pascua
bursa: cloaca
bucerum: pecus bubulum
buceria: armenta
bunde: sonus tympani
150 bullonium: luto quod lacerarii salsamentum dixerunt
butrus: uva
buxus: tibiolę et genus ligni
bucones: stulti, rustici
P. 39. bibinare: inquinare sanguine muliebri minstruum
155 bustuarii: qui corpora humana cremant
bubo: nomen aves nucturne
bruma: tempus hiemis
bruda: solida
burgus: castra
160 burrum: rufum
busticeta: sepultura in agro
bullantes: bullas emittentes
budus: incipiens
brutus: stultus

C.

catholicus: rectus
calumnia: falsa accusatio
catholica: universalis
cassiculum: reticulum
5 caticuminus: instructus vel audiens
catazizat: edocit, redarguit
cabo: cavallus
cannon: regula
P. 40. cacinnus: ridiculum, inutile
10 caplosus: inlisus
callere: scire, intellegere
caudex: rubor vel radix
capido: spatium inter parietes
cathecorias: adscriptionis
15 calathis: canistris
calestir: ubi vespę nascuntur
campae: equi marini
catasta: genus suplicii ęgolio semile
Causten: flubius Tracie
20 calleo: novi, intellego
calip: fornax ferri
camuribus: brevibus cornibus
cautris: cordis
calce: fine
25 carcesia: genus pucoli
cavillum: locum, convitio
carptus: discessus
P. 41. caleon: quasi humiles leo
catapota: genus calicis
30 canamala: canna de qua canetur
caritius: marmor
canditus: veste regia
caries: vetustas
catax: clodus a coxa
35 cartarinum: velanterior
calos: ovus, avis
catasceue: distructio

capite census: qui de capitebis sub corona vel sub asta vindibatur
carcer: locus inclusionis
40 calator: minester sacrorum
caducarius: heres qui in alterius bona succedit
calamalarius: ipse qui de canna canet
castalitati: de elocutione
P. 42. *caserserescaptivigene ex captivo nate*
45 casu: eventum pro eventum
casus: pericula
cancalum: dubium
cassa: vana
canamala: lanugine habente id est cidonia
50 caterva: multitudo
cassabundus: instavilis
cassibus: retibus vel telas araneorum
cartallum: canistrum
caterva: multitudo
55 catirvatum: multepliciter
carpit: detrait, fruitur
calculus: gladius lapideus et victoria id est iudicu
caule: ovile
calcolum: numerum
60 carmen: canticum
caupo: qui vinum vindit
caudalocus: ordo, series
caupones: stabularii vel tabernarii
cantabrum: cantare
65 P. 43. catuceum: virga Mercuri
clandestina: latentia
capidinis: eo quod manu capit
cano: canto
carisa: faba
70 caulae: ubi sunt avocati
cathaplum: conventus navium vel adventus
canora: cantu gruia vel suavia
cana: vetusta, antiqua
callidus: durus, malitiosus
75 carpacus: pistor
catus: sacer
carisma: donum spiritalem
carismata: dona spiritalia divine gratię
calabris: ventis siccis
80 P. 44. cataclismum: dilubium
careo: nolo
cacumen: summitas
cados: anfora semis
capacitas: amplitudo
85 cancer: forceps
carcire: abicere
calico: tenebre
capit: accepit
caculę: servae militum
90 cacula: ligna arida
capax: continens memoria
cataver: corpus mortuum a cadendo
caliotur: fallit
capissat: tenit, liventer accepet
95 catmea: vitorie non bone
P. 45. cavillatur: locatur, deridet, sed non simplici corde, et calumnia facit
caminus: fornax
capillacis: capillis prorictus
capite census: taxatio possesionum vel qui in capite tegerint corona
100 captura: detentio
calimbum: ferrum
capitilinus: capitulium serviens
caducus: demuniacus, inanis, deiectus
cancri: cancelli
105 candit: splendit
capite solutus: capite pericolo liberatus
castimonium: sanctimonium
capes: galeae militum
caristia: dies festus inter cognatos
110 catulum: ubi mortui feruntur
candes: vasa fictilia
capulum: manubrium gladii, id est spata
caperata: contracta rugosa
P. 46. carinantes: inludentes
115 canier: leno
cannar: senes
calamischos: calamos
cariscos: quasi in modo nocis formatus
cadices: arborum radicis
120 cauponalia: tabernaria
calamistratus: capillosus, compositus vel crispus
cave: obserba
canacem: gladium
capessere: capere, invadere frequenter
125 cautes (ras.) pula et saxa in mare latentia
callidus: astutia
cautus: sulecitus
cavillatio: derisio vel calumnia
canicularius: medio aestatis vel hiemis
130 P. 47. camene: musae
caracter: signum vel nota
cauteriata: sucensa
cavea: consensus spectaculi
caduca: peritura
135 calcitrones: qui infestant calcibus
casnomia: musca venenosa
caris: nomen saxi
calone: calearii militum
cantus: cantellena
140 caulę: cavellum ante iudicem
cameleon: quasi humiles leo
capparis: frutecti genus est lintis cosemile
calta: genus floris
clanculum: mane
145 claudies: claudi

classicus : celeuma navis
P. 48. classica : navigia militum
clanco : sonus tubarum
clam : ocultae
150 casu : titixi
clandire : cladicare
clanculum : diminutive
classicat : tuba sonat
chaus : profundum vel confusio rerum
155 crappulat : aebrietas
claricatio : clara actio
cladis : pestis vel calamitas
claustra : portę aut serratur[ę]
clamitat : sepius clamat
160 amicum ton filon
clausula : finitio, conclusio, firmi sermones
kaiper : super que
claba : fustis
clanculę : ocultessime
165 clandestina : latentia
P. 49. chelis : cithara
clericus : sors dei
clerimonus : heres
clemens : pius
170 clepit : rapit
clementia : pietas
cliscet : crescet
clypeum : scutum
clinicus : paraliticus
175 cliens : susceptus
clivus : ascensus
chirogus : funibus
cloes : pluvia
clepsedra : per quo ore colleguntur
180 clientella : officium clientis
clunes : coxae
clivanus : formus vel festus
chirografum : cautio propia manu scripta
clues : polles
185 clivanar : quasi tunica ferrea
climactera : tractus vel spatium mundi
clima : circuitus tractus vel aona
clupeum : ubi imagines proponuntur
P. 50. caeleps : virgo vel vir sine semine
190 caelitus : calestis
cęrine : aqua, nymfa
caelibem : solitarium
cęlata : sculpta
caelotes : voloces
195 cęnum : stercus pudridum
caelonites : caelestis
cęroleus : viridis
caeleber : freques
cęcunia : noctua
200 caeleber : sanctus
cęsaries : capilli
caelebre : solemne
cęlebritas : solemnitas
cęleberrimus : venerabilis
205 cęlebritas : solemnitas, vel conventus
caelibatus : sine oxore eo quod caelus sit dignus
caerates : serpens cornutus
caeles : qui et caelicolae
caeronomio : sacrum deorum
210 caementum : minidorum lapidum congregatio
chamaneus : possidens sive possessio ita autem dictus simo navicocharia
P. 51. celsa : excelsa, sublimis
celsus : altus
cerula : nigra
215 censura : discriptio, sententia
ceruleus : bistea marina
ceccum : cortex maligranati
cei : iudicatores
cere : frumentum
220 celidon : erundo, grę
cercilus : navicula modica
cemerias : silbas obscuras
cenum : loti voragum
certiscar : certior fiat
225 Cecropide : Atheniensis
cetron : tenebre
Cea : nomen insule
cerealia : arma pistoria
ceram : tabula vel imaginem
230 census : facultates
censetur : statuitur
P. 52. cerata : cornuta
ceraster : serpens cornuta
ceritus : subinsanus ex comutione ceribri
235 censura : sententia
censet : statuit, iovet
censor : iudex
ceu : axi, quasi
cecennit : cantavit
240 cernet : videt
crevit : vidit
censeo : iudico, statuo
censuet : deliberabit
cerebrosus : qui in cerebrum vitium abet
245 celidrus : serpens aquaticus
cernuus : in capite ruens
cenodoxus : vane gloriae copidus
certatim : stutiosim
cenodoxia : vana gloria
250 cedit : concedit vel socubet
P. 53. cessit : victus est
cespis : frutex
celer : velox
cementum : mendatium, cogitatum
255 celebrat : frequentat
celoces : navicolę
celox : navicula
ceterum : alia fabula
crateras : vasa vinaria
260 crapulam : inibriatet nausia oppotum
crabro : vespa longa

cretus: generatus
crebindia: signa vel indicia
crebo: spissum subinde
265 crebido: rima summita
crebruit: spessavit
creat: gerat
crepere: in corpore dubitare
crepusculum: finem noctis et initio diei
270 P. 54. creperum: dubium
CRISTVS: unctus
crispans: concutiens, vibrans
crisma: unctio
crismatus: galeatus
275 crinidior: crine prolixior
cruccitus: clamor corvi
crura: ossa tibiae anterioris
Crustumenus: populus
Crustumia: regio
280 cigneum: album
citam: velocem
Cintia: luna
citato tramite: curso veloci
cis vel citra: id est de ista parte
285 circumspectus: circumcinctus
circum pletus: circumdatus
civicā: civem facet
circiter: plus minusve
P. 55. Cilix: pirata
290 cirsum: carpentum
circumscripset: concluset, in praeiudicio misit
ciroxere: circumdare
citaxus: similes taxo
cirsus: vehiculi genus
295 ciparisus: cypressus
citissum: frutectum
citimum: citra omnia, proxumum
circum lectus: circumventus
cymbia: poculorum genera
300 circumquaque: undique
cicatrice: vestigium vulneris
ciliarcus: tribunus qui mille contribus ulibus
cicni: poete dicti a suavitate canticorum
circumvallat: circumdat
305 civitas: a conversatione multorum dictaest, quia multos contenet in una vita
P. 56. ciet: citat, vocat. voco
cicor: prudens, mansuetus
cicurare: militare, exorare, mansuefacere
citro: proximo
310 civivica: corona
citra: extra
Cillinius: Mercurius
circumvenit: fallit, decepit
circiae: radiis solis
315 circumvolat: circumdat
circumfundimur: circumdamur
citroque: et ulterius
citerius: exterius
citerior: exterior
320 cymera: bestia
circuitus: girus
ciere: concitare
citreus: pomerius
civita: ut frequentia maior
325 civis patricius: senatus
P. 57. circus: girus
cinnus: tortio oris, unde dictus est cicinnus
Cymbri: Galli
citro: hunc adnos
330 circopeticus: animalest semile simie caudati
ciritat: populum adloquitur
cinici: philosophi sunt a canibus vita ducentes
cinus: canis, Gre
chidaris: pallius sacerdotalis ex bisso hunc Greci et nostrithiarum vocant
335 cynocephalus: ipsi sunt homines qui capita canina habent
copolo: coniungo
copola: coniunctio
coęvum: coętaneum
coturnum: superbum
340 cosmum: summa potestas
P. 58. cocula: ligna arida vel vasa ęrea
coibet: conpescit, contenet
coercet: refrenat
coacerbat: colliget
345 conpescit: ponit
cognati: a fines sed per feminas
cogiorum: donatio imperatoris
coalescit: congluttinat
coacti: provocati, conpulsi
350 coetus: collectio multitudinis
coit: convenit, ambulat
coiit: ambulabit
coitus: concubitus, commextio maris et feminae
coitio: genitura
355 coiit: concubuit
coepit: inchoavet, initiabit
coepti: incoati, initiati
P. 59. cooritur: simul nascitur
coeunt: conveniunt
360 coarto: constringo
coerco: conpesco
chors: militum castra
coalescet: simul nutritus vel crescit
chor: multitudo rusticorum
365 collegium: conventus, societas
columes: salvus
collatio: conferentia
colaphus: pugnus
colega: sotius
370 calapisat: pugno cedit
coloni: incolae, inquilini

colluvio: commixtio
(c)oline: coquinę
coltax: clodus a coxa
375 colus: virga q' per cochea vulvitur
comit: ordinat, ornat, componit
comptus: conpositus, ornatus
comis: ornatus, subtilis
P. 60. compus: consimilis, magnanimis
380 commentum: argumentum, similitudo
compotem: partecipem, semile
compotrix: sotia adbibendum
compilat: spoliat
complosus: inlisus
385 comoratio: havitatio
comedia: historia comidi, grec.
comperi: cognovi
compages: coniunctionis
commolatius: uberius, amplius
390 commessatio: conviummeretrico
complus mentis: desiderii sui conpletur
comminus: prope, iuxta, et simul in se
commessatio: commextio
commertio: mutatio
395 comperendinatio: recrastinatio vel dilatio
commeat: iter agit
commeare: iter agere
P. 61. comat: frondet
commeat: simul ambulat
400 comiter: benigne
commessat: manducat
compernens: qui infestant callidibus
commessatio: commestio
commissatur: turpiter convivatur
405 commude: honeste
commedius: utelius
commentario: expositio vel adinventio
commentatias: adinventitias
commeatum: viaticum aut commite in teneris id est oratione et gradia
410 commentator: praecipuus disputator
comitium: tempora onorum quando dantur
comidium: locus ubi dantur honores
comitate: benignitate vel umanitate
P. 62. competa: fines, bivia, trivia, quatrivia
415 comparat: adsimilat
cõmulcat: conculcat
componet: ordinat
comenta: fraudes
comma: brevis dictio
420 comminiscit: mentitur, simulat
commentatus est: mentitus est
comminiscitur: commemoratur
commodat: ad tempus prestat
commentum: commune mendatio et librorum expositio
425 competitur: amicus
compulit: coegit
comitatum: sotietate
complectitur: continet
commode: utilis
430 complutere: repercutere
comes: sotius in via vel onos vel honor
comedia: signifigidio morum
P. 63. singolorum cum detractus quis fit in cerco
commulcat: conculcat, conturbat
consercrat: sanctificat
435 contuitus: contemplatus
contuimur: conspicimus
conpescere: pariter comedere
conpertum: conlatum, plenum
contumax: contemptor
440 confit: perfecet
conitio: aestimatio
condedit: edeficavit
connectit: coniungit
conplectit: conprehendit
445 consultum: iudicio senodale
conicit: consimulavit
contritio: mota plaga
consitum: contextum
conditus: sepultus
450 P. 64. confestim: mox, continu statim
condet: servat, reponet
connicita: coniectura, argumentum
convulsa: eradicata
congesta: coadunata
455 coniestio: collectio
conixe: coniuncte
conbentia: conspiratio vel consensio
contribuli: consanguinei quasi ex una tribo participes
contagio: morbum
460 contigus: proximus
contio: conventus populi
contitionatur: aloquitur
consulat: consilio dat
consoluit: consilium petivit
465 condensa: secreta
constipata: repleta
concretum: cummixtum, coaculatum
P. 65. conubi: coniugia
confertum: contextum
470 confutatus: convictus
conticuit: tacuit
convexa: declinata et cumportata
contaminatum: inquinatum
coniectore: arbitratore
475 coniectura: ingenium, argumentum
contemplatio: consideratio
concintus: simul in unum convocatus
concinnaverunt: ficta locuti sunt
concilia: amicum facit
480 conlibiscet: conplacet, delectatur
condiarium: domus stipendii
consuet facit: consuescere facit
conticuere: tacuere, tacuerunt
conspicuus: pulcher, altus

485 conibentibus: faventibus, consentientibus
consternatus: prostratus, abstupiscens et territus
confligit: luctatur, certat
P. 66. consulte: provide
consors: particeps
490 consultus: in consilio abitus
contabiscet: exsiccat
conversa: mutata
controversa: iurgium, lis vel causa
concinent: consonat a cantandum
495 concrepant: concinunnt, resonant
convoli: concordes
conflagravit: concremavit, exuset
conditio: potestas, lex inposita
conpilavit: furatus est
500 congluttinavit: copolavit, convinxit
conlustrare: circumquaque conspiciens
conclave: interior cubiculus
conluvione: conlectionim sordium
conclasare: adiugere classem
505 convicium: sermo iniuriae
conpatior: misereor
colivium: genus pecuniae
P. 67. confectus: debilitatus, maceratus
conserar: conpungar
510 conserit: interponit
conlabuntur: corruunt
cor: consentanens
consumimus: expendimus
consumpta: trasacta, expensa
515 concors: unius concordiae
colerat: simul cum citeris iurat
conari: temptari
conatus: temtatus, adgressus
consistorium: rupis alta
520 conpacta: coniuncta, conposita
continuatur: periuratur, congregator
condensati: consiti in uno
conlocati: collecti
constipati: collecti, condensati
525 conglobati: in unum volumine densi
conspirati: unianimes coniurati
conseremor: per ordinem facimus
P. 68. congeriaria: quod in populo erogat
conticuus: coniunctus, proximus
530 conum: summa pars galeae
confusa: conturbata
confundit: conmiscit
concilium: conventum
conlapsa: dibilia
535 contraimus: collegimus
convia: declivis
confore: futurum esse
concrepuit: sonuit
confieri: effici
540 concidit: simul cecidit
conlinati: mensurati
contratus: cauto placitus
conbibiones: a bibendo dicti
conplices: sotii
545 conpedium: locrum
conticinium: primum tempus noctis com omnia quiescunt
conticescere: quiescere
consumat: finet, explicat, conplet
conpertum: conportatum, plenum
550 conpertum: cognitum
P. 69. conperi: cognovi
conpererant: cognoverant
consuetio: consuedudo
confuse: permixte
555 coniector: interpres
confossus: vulneratus
coniectus: in vinculis missus, inpulsus
congeries: congregatio
congerit: congregat
560 conserere: conferrere
contactus: inquinatus
contra fas: contra ius, damnum
contra nefas: scelus contra
conclivum: crematum
565 concitus: festinans
congruit: convenit
contagies: contactu in culturis
conflixerunt: concertati sunt
convexo litore: rotundo
570 conlibuit: conplacuit
conspicatur: intendunt
constans: animum firmus
constantia: animi firmitas
P. 70. cognitur: curiosus
575 conpanipularis: conscius, collega
consubrini: qui ex duobus sororebus procreantur
contumelia: iniuria clamoris
consciscunt: coniungunt, consonant
chornus: tempus
580 corda: animus
color:
coram: presentibus
corilus: avellanas
corpulentus: corpore plenus
585 cornua: fortia vel potentia significans
cornipides: equos
corax: corvus
corsam: divinans
corturnum: caltiamentum
590 corscum: crispum
corimbata: nabis
coruscatio: speldor
culpat: infama, vitoperat
culmmen: summitas
595 cunabulis: initiis vel ab infantiis
curtina: respunsum
cruor: sanguis
P. 71. curriculum: cuncti temporis cursum
curio: pronuntiat populum

600 cuncur: densus populus turma hominum
cunctatio: dubitatio
cudit: sculpit
culix: zinzala
cur: quare
605 cudietur: inpellitur, percutitur
cuiuspiam: cuiuscumque
cudere: studiose agere, facere, scalpire
curalisella: ubi consules sedent
cultur: vestitus, ornatus
610 cunctanter: difficulter
cupido: amor, cupitidas
cuspis: summitas aste
cumba: navicula modica
culmus: calamus frumentorum
615 curvato gurgite: ericto fluctuo
P. 72. cursi: citius
culmen: gilionibus
cuniculum: degestio aquarum
culmo: arista gillone
620 cuinam: interrogatio de persona
cuidam: cuiquam, alicui
celeus: tunica ex partu in modo eronis facta qua liniaebantur pice et bitumine, et in ea includebantur umicidę cum simia serpentē et uno capone, ac insuta mittibantur in mari, contendentibus se animalibus quo ire se dicuntur abinvicem homo maioribus poenis aficiebatur

D.

danus: feneratur
danista: feveratus
Danai: Greci
Dardani: Troiani
5 P. 73. draconia: gemma ex cerebro piscium
Davus: senes discinctus
dapsilis: largus dapibus
dapes: epulę
damare: capere
10 dat venum: vendit
davir: draculum
damma: genus capreę similis
decalocum: dece verba legis
decus: gloria
15 dedecus: crimen
dilibo: immolo
deluit: labit
delibutus: untus, perfusus
delinquet: peccat
20 delituit: latuit
delitescet: latet
deliquum: defectum
delitescere: diu latere
delinitus: depagatus, unctus
25 delicat: probat
delata: in longo ducta
delubra: templum, ara, idolon
delusit: circumvenit
debella: ex pugna
30 delabunt: deficiunt
P. 74. delicuum: defectio
devotus: dicatus
delictum: peccatum
dedicatus: promissus
35 delĕberat: cogitat
densitas: spissitudo
deiscens: aperiens, ianuis patefaciens
dedunt: tradunt
denique: postremo
40 degit: habitat, vivit, agit
dedicat: consecrat
devotio: distenatio
devota: distanata
defeneꝗ: vindidavit
45 devinctissimo: inseperavilem
demum: postremum
deinceps: deinde, postea
desitescere: necligenter agere, contemnere
dependere: pro alio solvere
50 decenturius: ingeniosus
P. 75. deterremum: de malo peiore
depromunt: proferunt
decipula: laqueus
depromuerunt: protulerunt
55 deviat: errat
depopulatus: devastatus
dedicius: qui de sua provintia ad alia se tradet
declivis: inclitus locus
deflat: inridet, dedignat
60 dedegit: denutat, manifestat, provedit
devium: extra via
dedo: trado
deditus: traditus, sublectus
dedita: opera valde data
65 dedas: tradas, des
devito: diverto
deserta: direlecta, disoluta
depenendi: reddendi
decuria: numerus decem hominum
70 decretum: definitum, statutum
depeculato: defurto puplico, deo demptato
P. 76. decrepitus: valde sónis
deriguit: obṭ stipuit
deflet: lugit
75 demicat: pugnat
detestabilis: abuminabilis, pessimus
devertice: de summitate
desipiens: amens
dementicus: insanus, amenticus
80 desistere: desinere, cessare
dementia: insania, amentia
devinctus: legatus
defensus: fatigatus
deglubere: belligare
85 dependit: reddit

dextrum : prosperum
derogans : detraens, vitoperat
detracta : valde detractat, contemnit
detrectare : recusare
90 demolitur : exterminatur
deflunt : cadunt
P. 77. depascet : comedet, non consumet sed degestat
defreta : disperata
deplet : evacuat
95 defunctus : mortuos
deplene : de pleno docere
depalata : manifestê divulgata
debellio : bellatur
desidia : pegritia
100 demiror : dispicio
denus : nomen pecuniae unde et nummus denarius dicitur
demet : tollet
degenerat : a genere suo dissimulat
detectus : nudatus, deopertus
105 denique : pos modum, deinde
detrusus : expulsus
devorat : glottit
demsit : tollit, delivit
desivit : cessavi
110 decedit : cecedit
decernunt : statunt
depositum : creditum
denodat : detrait
degener : ignobilis
115 P. 78. devectus : deportatus
deicet : deturbat
de more : ex consuitudine
degladiando : pugnando
defunturium : transitorium
120 derivatum : sparsum
demeda : praeceda
debellet : rumpit
devitat : spernit
devinxit : conlegavit
125 delegit : eliget
desciscere : deficere
depudiscente : inpudentem
desevit : ad iracundia lenitur
deposcit : vade rogat
130 dedecet : non dedecet
dedecus : ingloriosus
delictus : veruclatum quem dicunt
defecatum : liquidum, purum, extersum
delubra : templa ideo quia in in gressû lacus aque fiebant ubi [P. 79.] se sacerdotes sacrificaturi purificabant et ad diluendum id est labandum delubra dicta sunt
135 derelictus : dimessus
decens : pulcher
deformis : fede formę
desuetus : inconsuetus
deiscet : os aperet
140 deverticulum : ubi camsatur
decrevit : ordinavit
deprovatum : deformatum
depraces : genus serpentis
deses : ignarus, piger
145 devulgat : puplicat
destituunt : relincunt
dedocere : de doctrina evacuare
despectat : despicet
demum : iterum, secundum
150 degerat : per deum iurat, male iurat
despirat : spiritum tollet
P. 80. deflectit : deviat
deunce : dece untiarum
defitiscit : defricet, fatigat
155 delictum : peccatum
delivat : precepit, degostat
debaccatur : provagatur
defruet : minuet
desecto : inciso
160 delirat : cessat
destitus : relictus
detrimentum : dispendium
deditio : sui traditio
destitutus : derelectus, desertus
165 despicatis : patefactis
decumbit : infirmatur
decidium : qui cito decedet
delationis : proditiones factorum
deuterunomia ; quasi seconda lex
170 dialogus : disputatio
dialecticus : disputatur
P. 81. dilargus : multum donans
dispectus : cumtemtus
dia : potestas
175 diathece : testamenta
dilatus : aductus
diaria : actio sed unius diei
distraxit : abstraxit
dicat : dedicat
180 discernit : deiudicat
distinat : disponit
difficulter : tarde
difisus : disperatus
dilectum : electum
185 disidem : pigrum, ignarum
disipet : sapere desine
discidium : separatio
dirimit : dividit
diripiunt : auferunt
190 divale : divinum
dilucolum : ante mane
distentus : satis plenus
dirivitorium : loci contubernii
divalis : princeps, imperator qui quasi deus habebatur
195 dissectus : divisus
P. 82. divortium : repudium
dilectus : carus
discerpsit : diripuit
diermi : turpis
200 dimicat : pugnat
discolor : dissimilis
dispectabilis : contemptebilis

dictitat: frequenter dicit
disto: dissimilo, differo
205 distitet: cessabit
disceptat: disputat
discrimen: periculum
dispendium: damnum
disceptatur: litigat
210 discipulati: edocti
dilubium: lavacrum
dirus: crudelis
diversum: consentiens
discretu: divisum
215 dispalatum: dificatum
diermi: turpis
dimolire: dissipare
dipsas: serpens
diverberat: disiungit
220 diurnum: unius diei
diapsalma: spiritus pausat
dicatio: conscratio
dessidet: discordat
discors: dissimilis cordis
225 diuturnum: multi temporis
P. 83. dypfnoicos: difficultas spirandi
discerniculum: ornamentum capiti mulieri
dictator: imperator qui dictat erdinat exercitum
dirivat: a suo curso convertit
230 direptus: praedatus
digegitur: dissipatur
diribere: dinumerare
dirimire: separare
dispertit: patitur
235 discidium: separatio per vim facta
disetatines: disputationes
dis manibus: dis inferorum
diutinum: diuturnum
dissertum: expositum
240 distinctum: apertum, manifestum
distractum: venundatum
diuncem: undicem untias
discolus: difficilis
dispernit: contempnit
245 discidio: dispositio vel subligentia
distentus; cibo plenus aut virgas extensus
diplumum: duplicatum
P. 84. disserit: disponit, narrat
diplumatarius: duplicatur
250 diverticolum: quod brevi loco divertitur
distinctio: separatio
diutinum: diuturnum
diditus: divulgatus
dipulit: dispersit
255 divexum: inclinatum
displosa: divisa
divaricatus: satis separans
divesupu: locuples
diversurium: hospicium a divertendo
260 dicto citius: quam dici potes
discrepat: dissentit
dispares: dissemi
diruit: eiecit, evertit
dialis: cottitianus
265 dissecere: dissipare et in diversas secare
diriguit: rigitus et frigitus est
digressus est: abiit
disparile: dissimile
disidentes: discordantes
270 dispicatis: minutis partibus
didior: dividior, doctus
P. 85. discrevit: separavit
dissinso: discordia
dipsas: nomen serpentis
275 docitat: frequenter dicit
dilata: in longo ducta
divinitus: quod ex divinitate fit
dogma: doctrina
dolus: fraus
280 dorcades: quadrupes capreo similis
documentum: exemplum
dorcas: caprea
dolabra: securis vel asciae Iapetaria
dolones: tela abscondita
285 Dolopes: milites fini condotati per manus
Densa: nomen insulę
docimentum: alterius exemplum
domata: moenia dicuntur vel certe superioris domus
dubium: incertum
290 dumtaxant: praecipue, sine dubio
duces: ductores
dumi: spinę
dumeta: loca silvestria, spinosa
duellium: secundum bellum

295 P. 86. dulcia: iocunda
dumus: spina
duca: furmula
duella: ? viii
duellius: aversarius
300 duellum: bellum duorum hominum

E.

Evangilium: Bona adnuntiatio
. . . citas: multituto
edax: comissatum
etacitas: voracitas
5 edito: prodito
edictum: future dicisio
etacitas: multituto comessationis
educat: nutrit
effabilis: docilis
10 edemitat: dentes secludit
efatur: loquitur
eflagitat: reposcit
efferetur: funus dicitur

effeta : adaperire
15 effemeris : cottitiana res
effrenati : immoderatus vel abruptus
effeminati : mollis eviratus enervatus *tamquam femina mollis*
P. 87. *effeminatus : stupratus*
effecit : perfecet
20 efferiebamur : superbievamur
efficet : sufficit
efflavit : exalavit
efugium : locus refugii
effetanda : disputanda
25 effeta : sine fetu
effeminat : in femina convertit
efferus : ferox, inmansuetus
effivi : aduliscentes
effebus : inverbis
30 egerimus : tollimus
egrate : exegrate
egerit : excutit, foris mittit
egre : moleste
egestio : curatio
35 eger animo : dicitur
egestio : purgatio
elatus : superbus
P. 88. elavi : evadere
eloboro : sitro
40 elapidavit : distruxit
elegantia : pulcritudo
Elisei : Cartaginensis quando et ilisica dicta est
elchere : evocare
elementum : celum, terra, sol, ignes, natura
45 elapsa : discussa
elivicata : purificata, deplanata
Elisius : pagani beatus nuncupavat campos
elinguis : mutus, nullius lingę
elogia : pars carminis
50 eluxit : luctum deposuit
eclesia : congregatio
elues : ligor qidāde quod aliquid eluitur
elogium : titulum cuilibriei
elatus ambiciosus, superbus
55 eliciens producens suadendo, traens
P. 89. ecudit : excudit vel producit
eculeus : genus turmenti in quo stans extenditur homo
emax : emptor
emaces : emptores
60 emacitas : emendi aviditas
emeritus : milis vetera
em : admiratio
emereor : conplaceor, numquid iam conplevit malitia
emicuit : repulsit
65 emerita : arma victricia
emolumentum : locrum
emeritum : furiarum
eminet : exta taltum est
eminens : excellens, altus
70 emolus : invidus
empurius : locus supemare
emblema : ornamenta vasorum
emfaticum : audax increpatur
empesū : empos, impatiens, amens
75 emuniles : modice eminentibus
P. 90. *ensito : insertum*
enervat : castrat
enervatus : mollis, efeminatus
enitor : conor
80 encrypias : subcineritios vel occultus panis
enixa : conata
enisi : conati
enormis : sine mensura
enotat : explicat
85 enixius : instantius
enixe : sedule, inpense
ensicium : a secando
enodis : sine nodis
enormia : grandia
90 enucleatim : clare, manifeste
enucleo : perpendo, expono
Eolus : rex ventorum
eo minus : tantum minus
epiphania : aparatio, ostensio, manefestatio
95 epithoma : adbreviatio
epithomarius : abrevicatur
P. 91. epicrama : abreviatio
epimiris : diurnis
epilogon : narrationes et ratione
100 epithapium : carmen mortuorum
epilogus : extrema pars libri
epitalamum : carmen nuptiarum
epifora : lippitudo oculorum
epistula : scribula
105 epus : lux
episcopus : superinspectur
epotat : ebebit
epulum : convibium
ephot : quod est super humerales sine cucullo vestis sacerdotalis casullę cuius vestis duo sunt genera unum lineum et simplex quod sacerdotis habebant, aliut diversis coloribus et auro gemmisq contexta quę solis pontificis utibantur
110 P. 92. epichrimata : conamina
equidem : ego quidem
equiperant : equidem facit
equos pegassus . alatus
ergata : vicinus vel operatur
115 eragine : e contra
era : domina
Erinis : Furia, ira magna
ermana : calamitas
ermula : statua sine manibus
120 erisibe : erugo ę̄ tribicommessio
erga illum : circa illum
erciscende : dividende
eruditus : doctus

erumna: miseria
125 ergastulum: operibus duris
ergastulum: locus ubi damnati marmoris secant nam grece metallum dicitur
P. 93. esedum: veicolum
estrita: caput
esidat: comedet
130 esu: esca
esedarius: mulio veicoli
ethesiae: venti in certo tempore
essentia: subsistentia id est uniuscuique persone
Etrusci: Tusci
135 ethica: moralis sed proprietas
ethicon: proprium
Etruria: Tusca
ethnicus: gentilis
etymologia: paratum verbum
140 eugenis: nubilis
evoma: effundat
eugenia: humelitas
evum: tempus
evehit: transportat
145 evirat: castrat
evo: seculo
evitat: declinat
eventus: successus
evolvet: exponit
50 eviscerato: exempto
P. 94. *eonas: secula*
evulsit: expoliavit
evanuit: aufugit
eulilogi: versiculi
155 euychias: dilitias
eu: *laudantis est vox*
evelantur: spoliantur
evidenter: manifeste
eurus: ventus subsolanus
160 evelatus: spoliatus
evidens: aperta
evatatur: flagitat
evantes: fugentes
evistigio: statim
165 evetatus: pertritius actu privatus vel ocisus
Euterpe: nomen musae
euripus: piscina longa
evertit: funditus movit
Eumendum: Furiarum
170 euebaristia: gratia
eus: vox inclamantis
P. 95. exta: interanea ostiarum
extat: emminet
exalat: spirat
175 exaditat: excludit ab aditis
exaustis: exacuatis
exsanguis: sine sanguine
examussi: ingredere diligenter
examinat: inquirit, discutit
180 exitus: excessio, mors
exorsus: incipit loqui
excedit: errat
exomologismum: preces vel confessionis
extimus: extremus, extraneus
185 expiat: purgat, mundat
exerat: aruminat
exploratores: inquisitores
P. 96. excurat: vigilat, observat
extimuit: satis timuit
190 exprobrat: inproperat
exor: sine sorte, eretidates
extat: supereminet
exultat: exilet
exesum: cummistum
195 ex intervallum: ex inposito tempore
excidium: expugnatio
exemit: produxit, abstolit
exubite: spoliaquę, ociso oste tolluntur
exertum: apertum
200 exilis: gracilis, macer
expers: sine consilium alens
exitiale: mortifirum, periculorum
experrexi: evegilavi
expertus: probatus
205 exequia: mortuorum obsequia
P. 97. exolitus: dissulutus
extulit: elavavit
explodit: expellit, vitoperat
extrinsicus: a foris visceribus et exterius
210 exuti: spoliati
extinctum: interfectum
exestimatio: cretulitas
exosus: odiosus
exorit: aperit
215 exanimis: sine anima
extimplo: statim, mox, continuo
exedent: comedent, devorant
expergefactus: a somno surgens
exordiarius: ludus theathri
220 excellens: nubilis, eminens ceteris
exitium: calumnias, periculum
exulcerat: verbis asperis vulnerat
exaustis: vacuis defectis
P. 98. exedra: hoc subselliorum id est absida salutaria
225 exortus: natus
explodita: exclusa
exorię: nascentię
excivit: excitavit
exciturum: excitaturum
230 expromimus: exponimus
exeremus: proferemus
expilandi: nudandi, praedandi
expelatores: aliene ereditatis subtractores
exaustant: exauriunt
235 exestuat: fluctuat, fervet
exumptuavi: pauper factus sum
expergifica: suscitabilis
explodam: evertam
exomnis: vigilans

240 experiendum : experimentandum
exspes : sine spem
excors : sine corde
expectorat : extra pectus elci
exephebis : a pueritia
245 P. 99. extorris : exterminatus extra terminos
experientia : prudentia
expergiscor : excutior
expediam : explicet, liberet
experire : cognoscere
250 exoptatum : disideratum
exulto : gaudeo
extrusi : expuli
extruso : expello, recludo
expiabilis : (*rasura*) inmundus
255 extixe : extincsisse
excitur : evocatur
exfretat : navigat
expertia : aliena
exagerat : provocat, explorat
260 experiar : cognoscar
experta : docta
P. 100. eximietas : sublimitas
exuberant : profluunt, habundant
exolescit : defecet
265 exuit : deposuit
exolevit : in oblivionem venit
exemplum : formam
explet : perfecet
exuret : cremat
270 exerti : evocati
expositus : in medio positus
exempla : sublata
exemptum : explicatum
existite : perdurate
275 exemplaria : similia
exere : producere
ex coniectura : ex arbitrio
excanduit : in iracundia exilibi
exodus : exitus, egressus
280 exolidus : dissolutus
exorabilis : placabilis
exormis : inmanis
exitie : poene sententię
expressit : explanavit
285 P. 101. excautus : intentus
extestinum : extraneum
exanclare : exaurire
ex tasin : mentis excessum
expediunt : educunt, proferunt
290 exvito : diverto, divido
extespices : aruspices
exidium : divortium, repudium
exinuat : exemplat, exaperit
exlex : extralege
295 excedendus : devorandus
exercita : miserabiliter sollicita
exete : evidenter, perspicue
exemptis : sublitis, conplicitis
experimentum : usum
300 exaurit : evacuat
exerti : nudi
exintervallum : exintermisso tempore
excidium : eversio urbium, separatio
expuncta : finita
305 P. 102. eximius : praeclarus, sublimis
exporrectus : extinctus
extorris : exiliatus
extorrem : extra terra propria expulsus
experita : parva, vacua
310 extudit : dtundendo extorsitum
exclusit : propiam expulsus

F.

fabor : testimonium ladis
facitus : elegans, iocosus, eloquus
fabre : perfecte, arteficiose
facundus : abilis, gratiosus, eloquens
5 facitia : iocus, elegantia
facesie : eliganter
fatiscet : aperitur
factitat : frequenter facit
facinorosus : scelestus
10 facilitas : possibilitas, licentia
facitior : hilarior, gratiosus
P. 103. facesso : duo significat, facet facesset et frequenter facio
faustus : festus
fautor : qui fuit et consentit
15 facinus : scelus, factum
factus : superbus, contemptor
facinora : crimina scelestia
fas est : ius est vel ratio
facinnat : quando laudando decepet
20 falanx : legio, lingua macido
faces : faculę
fandi : loquendi
falerare : ornare
fatus : locutus
25 fanum : templum
fatur : loquitur
fando : loqendo
fassiloquax : mendax
familiaris : domesticus amicus
30 falaria : lancea magna vel genus teli magni
farcire : fulcire, implere
fatuus : stultus, sine sensum
fallet : decepit
fax : facula
35 P. 104. Fascenninas : clausebiles vallationis
favisor : consentaneus
fanaticus : aspectus honorosus
fanatici : minestri templorum
falernum : vinum
40 faxo : in'endo
faxo : faciat, tempus futurum
famereas : mortiferas
fartores : saginatores

fameticum : a fama vel esurientem
45 farra : frumenta
fana : inlicita sacrificia
fassus : confessus
famicus : locus in urbe
fatidici : fata canente
50 fauces : angusta claustra
falcidia : quarta pars
faleras : atolator averba
fatiscunt : feriendè dissipantur
fatiosus : fallax, deceptur
55 P. 105. fariolus : vatus
factio : coniuratio
fascinant : gravant
farus : turres speculatoria
faustus : felix, laudavilis, benignus
60 facultas : conditio, possessio
fastus et fausti : libri sunt ubi sunt nomina consolum
favisio : suffragium
fatidicus : divinus
fasta : honores
65 farisei : divisi
faxit : fecit
fastes : honeres
fastigium : culmen
faemina : a femore
70 faetivus : letus, conpositus
faemor : quod super geniculu est
fastidum : superbia, contemptus
fateor : confiteor
fa :
75 flagitat : postulat, expetit
flagris : flagellis
P. 106. flabri : fabulosi, ventosi
flabris : ventisicci
flagitiosus : crimenosus
80 flagtium : adulterium livitum vitium
flagrantia : ardentia, suavitas odoris
flagras : ardens, fulgens
flamina : venti
flamea : virginitas
85 flammigena : de flamma natus
flammonius : honor pontificales aput gentiles
flamen dialis : sacerdos Iovis
flagra : incendia
flavum : rureum
90 flammeo : irato
fluvidus : inpetuosus
flabra : fysimata vel venti
fluxerunt : ceciderunt
fluxa : resoluta
95 fluidum : mollem
fluit : deducit, currit
fluxum : vanum
fluctuat : vacillat, dubitat
P. 107. flammen Martiales : sacerdos Martis
100 flamen yrinalis : sacerdos Cyrini. Cyrynus enim aput Romanos deus fuit
fertilis : fructuosus
fecundus : cupiosus, fertilis
fecunda : fructifer
fere : prope, pene, forte
105 ferme : circiter, prope, propter
ferales : mortales
fer : tolle
fercula : missoria
fervidus : turpis, iracundus
110 fertur : dicitur
ferunt : portant, dicunt
feretrum : lectus in quo mortui portantur
ferux : crudelis, stevus
Fenices : Carthaginensis
115 fedant : inquinant
festivus : feriatus
P. 108. *fefellit : elusus vel inluset vel frustratus sive concisus*
ferascit : efferum facit
fessus : fatigatus
120 Feronia : dea agrorum
feriae : cessationes ab opere
ferisne : poteris ergo ferre
fletus · lamentatio, luctus
fenus : usura
125 fenicum : coccinum
fenerat : mutuat, inpromutat
femor : duplicitur diciter, dicitur ab eo quod est femor femor, facit ab eo quod est ab hoc femine facit femen et declinatur quomodo carmen
flevile : lamentabile
fiduciarius : qui re aliquam fiducia accepit
130 finum : stercus animalium
fio : efficior
fistulor : sibilor
fibras : figata, pulmones, iocinora
ficubus : corde cithare
135 P. 109. figolus : fictor
fincxit : conposuit
ficti : pravi, falsi, simulatores
fidicula : cetharedi
filargyria : avaritia, amor pecunię
140 fidicula : genera tormentorum sicut lāminę
fibea : luna
finctus : formatus
fidicina : citharista
figmentum : similitudo
145 finitimi : vicini, confines
finget : simulat
fidiculę : cordę
fibula : ligamenta
figmenta : conpositionis adinventiones
150 fragor : sonitus, strepitus
fragosus : torrens
fremit : rugit, furet
frendit : dentibus stridet
P. 110. fretus : confisus, fiducia havens
155 fratruelis : matertere filius

fratria : fratris uxor
fribula : vasa fictilia
fragores : tonitrua
framea : asta, gladius bis acutus
160 freta : maria
fretum : mare angustum
frenat : conpescit
fremunt : strepitum facit
fribous : levis, mendax
165 fribula : imaginaria, caduca
focilat : refecit
fomes : nutrimentum
fomis : lignum aridum
fomites : initia, incitamenta
170 fotus : recreatus
fovit : nutrit, studet
P. 111. futa : nutrita, plena
fors : fortuna, casus
forenses : qui in foro sunt
175 fores : ianuę eo quod fores ponuntur
formidor : timor
format : figurat, creat
fortunatus : felix, beatus
fosforus : lucem portans
180 fomidines : pinnę, licivę in sagittis
foederati : amicati
fornex : camera
foeda : turpia, inquinata
foebes . sol
185 focas : vitulus marinus
forceps : forcipes fabri
fotiles : inanem, vacuum
forsan : fortasse
forex : foturum esse
190 fortuitus : subitus eventus et casus
fortuita : subita vel repentina
fortuna : felicitas
P. 112. foliatum : curvatum
foedus : amicidie pactus, iusiurandum
195 forceps : clusum carcer
formidans : timens
formidolosus : temidus
fornicem : arcutiiumpalę plateę
frugalis : abstinentia, parcitas, passimonia, ubertas
200 frutecta : ramorum densitas
frustratus : deceptus, exinanitus
frusta : particula modica
fructus : usus consecutus
frugi : magnanimis vel continens substantia
205 frutices : ramos
frustra : inanis, sine causa
fructutus : fruiturus
fruges : frumenta
fucata : tincta, colorata
210 P. 113. fucatus : tinctus, dolosus
fuco : dolo
fucus : vermicolus
fufae : interiectio mali odoris
funditus : a fundamentis
215 fungit : agit
fultus : auxiliatus
futo : amplexo
fulcit : manit, firmat
funeture : funeris instrumentum
220 fulcitus : sublevat
fulvum : rubicondum
fulciat : adiuvet, auxiliet
fulmen : fulgo, iacula
fusus : fugatus
225 fusi : iacentes
fulcitrat : fulmen prę̨mit
fulgidum : splenditum
fumidu : fumosa
functus : minestrans
230 fulva : rura
fundi : praedia, campi
fuma : terra
funesta : scelesta
funus : deductio mortui
235 P. 114. (f)unera : luctuus mortis
fungitur : agitur, obsequitur
funus imaginarium : tumulum sine catavere
funestum : perniciosum
functione : misteria
240 funtio : tribulatiorů exolutio
furfuraculum : tenebras
futilis : levis et inconstans
fungimur : utimur, solvimur
furor : iracundia, temeritas
245 fundandus : rusticus qui fundicolit
furia : ira magna
furebundus : valde iratus
furiata : dolore concitata
furva : obscura, nigra

G.

galerum : pylleum pastoralem de iunco factum
P. 115. Gabrihel : fortitudo dei
Gallilei : volubilis
galerus : calamaucus
5 ganeo : gulosus, tabernio, propinatur
ganea : taberna
gannit : muttit
galibare : mortuorum condita corpora
ganeus : luxuriosus
10 garrula : versa
garrulitas : verbusitas
garrit : verbosatur
gazofilacium : dividiarum et tẽsaurcustudia
gaza : divitie, lingua persa
15 gastromargia : ventris ingluvies
galbanus : genus medica menti id est
gamus : nuptie
garon : liquamen
ganimen : tabernarius
20 gausicum : genus pallii
P. 116. genenealogia : linea generationis

generalis : universalis
generaliter : universaliter
genitura : seculi posteritas
25 gentale : originale
gessit : egit
genesis : factum, discretum
geometria : mensura terrę
gestum : motus corporis
30 gestatu : potatum
genitalia : sexus virilis et feminę
genimina : generationis
generosita : nobilitas
gelidum : frigidum
35 Getoli : Afri
gerusa : notrix, conpotrix
germina : semina
genium : virgo
germen : initium floris
40 genalis : lectus qui in nuptiis sternuntur
P. 117. genuinum : initium necis et nature id est insertum
geniculationibus : adrationibus
geometra : suppudandi arte peritus
gerolu : baiolus
45 gerit : agit
gestat : portat
Gete : Gothi et Trace
gentica : gentilis
gentiunt : anseris
50 geniatus : gratus
genę : mala in facie id est sub oculis
gerotochomium : locum venerabilem, in quo pauperi set propter senectute sola infirmi hominis curantur vel pascuntur
gneumon : dicitur pulmo
gymnasium : et palestra et adiutorium magistrorum unum dicitur anuditate et alterum ab ext ?
55 gymnasiarces : qui princeps est in gymnasia
gymnside : lavacrum, balneum
gymnos : nudus
gorstus : faretra
gignit : genera nascitur praeluium
60 gymnasta : exercitatio est palestra ipse locus agon vel ubi unguntur palestrę luctatores
P. 118. gylbus : malbum et nigrum, medius color
gratia : donum
gretissimus : iocundissimus
gramma : littera
65 grandevus : senis
grassare : invadere, predare
gradatum : paulatim
gratitur : ambulat
grandenato : ex nubeli natus
70 gremium : sinus et praefectura sedes
gremia : sicamina lignorum
gripes : alites ferę
grus : grues
grumuli : tumuli
75 gramen : genus erbę
gratis : gratia inpensa sine merito
gratatur : gratulatur
grassatur : invasor
grumus : ageratum
80 gratutum : gratu habitum
gratificus : gratis faciens
grumat : diriget, aequat
gregariis : vulgaribus
gnuus : fortis, agilis
85 gnarus : doctus, perfectus
P. 119. glauco : viridi, presso
glevo : rusticus, arator
gleva : cispis durus
glovus : vertices
90 glaber : calvus
glomerat : convolvet, nectit
glaucoma : offusio oculorum id est nebula
glosa : congregatio sermonum
globus : rotunditas, condensa volumine
95 gloria : magestas, laus
globat : acerbat
glosia : veri soror
gnsia : terra gl
gurgustium : tegurium umile et tenebroso
100 gurgustia : loca tabernorum tenebrosa ubi convivia turpia fiunt
gurges : altum in fluminibus et profundi locus

H.

harundo : canna, kalamus
haurit : implet, bivet
haustum : epotatum
haut procul : non longe
5 hasce : as autem
P. 120. haut frustra : non sine causa
habilis : aptus, opportunus
halat : oscitur
hausta : gostata
10 hato : mendax
hamatum : uncis circumdatum
halantes : redolentes
habitudo : conpositio corporis
hausit : bivit, inplevit
15 haut secus : non aliter
haecine : ita vero
havene : frena equorum lorarum tenacula
hanelat : spirat
habitus : qualitas corporis
20 herus : vir fortis vel domnus
herei : domini
here : habe
hevenum : genus ligni indici

hera: donmina
25 heliotropoli: nomen gemmę et herba solis equiām
P. 121. hebitudo: fatuitas
heres: filius
hesitat: dubitat
hedor: aqua
30 hersutum: asperum, vellosum
herugo: sanguisuga
heroes: viri fortes
heroes: dicuntur qui dum vivunt et virtute nubile sunt et post mortem gloriam dimittunt
hecui: alicui
35 hebes: murio
hestispicus: aruspix
Herebi: inferni
heruum: anticorum
heremum: desertum
40 helitores: ortolani
herbedum: herbosum
hemenum: novum nuptus
herenicas: antiquitas
Heumenia: Thesalia
45 herma: castratio
heu: gemitus
herit: fixum est
hebitant: stupiscunt
helluo: glutto
50 hilaritas: lętitia
heculaneus: eunucus
heiulatus: ululatus, he
hereses: sectę
heus: ingemiscentes est
55 Hermes: Mercurius
hermaproditus: castratus
Hercle: vere iuratio est
P. 122. hermafroditus: nec vir nec mulier
helluantes: avide comidentes
60 hespirias: occidentales partes
hebrei: transgressores
hesperus: stella quę primos sero apparit
hymnum: carmen in lade dei
hymnum: laudem cantici
65 hymen: nuptię vel carmen nuptię
hydromates: qui ex aqua divinant
hypocrita: simulatur
hylidrus: seu ytri, serpentes aquatici
hydroplasmus: cantio quia organum componit
70 hiantes: os aperientes
hiliis: intestinis
hiulcus: pastor
hiacintum: flos porporeae
hianiā: margarita pretiosa
75 hirti: anni grassi
hirta: aspera
hippecus: navis
P. 123. hictirici: ydropici
Hiberia: Spania
80 hispida: spinosa
Hisperia: Italia
hiscor: os aperior, loquor
hirtus: asper, setosus
hir: q ł pts vigil
85 hirta: fetosa, plena, grassa
hispidum: asperum, orredum, pilosum
histrio: mimo scenicus
himeus: nuptias
hiultum: patens, aperens, apertum, ians
90 hippus: navis ium^{en}taria
hiscit: apertus incidit
hiātes: ampliantes
histriones: praepositi meretricum
hircus: caper
95 hiscitur: dividitur
Hiersolima: visio pacis
Hyades: stellęs (*ras.*) quinque in modo quinque littere in fronte tauri posite
hiscine: ipsis autem
historia: fabula
100 hirco: stupeo, miro
hiersolima: quasi usolo mone accepit nomen hierisalomonia
P. 124. historiogrofus: discriptur fabularum
histrix: quadrupes spinosum
hiat: aperit
105 hincine: hinc vero
hirsutus: asper, vellosus
hiverna: loca callida propter hieme facta
historia: rei praeteritae memoriali
hirudinis: sanguisugę
110 hiena: epicenon est gens beluę
hiatus: spissura, vorago
hibleus: flos vel fluritum
hiemis: frius, tempestas
hiscere: desineri
115 hostia: victima
holocaustum: totum incensum
honos: honor
hospitalustra: hospida, peregrina
horror: timor, pallor
120 horridus: timidus
horrificum: expaviscendum
P. 125. horne: huius anni
horno: hoc anno
hostit: aequat, planat
125 heletor: orti vel olerum cultur
hortatur: suadet
hortor: suadeor
hostimentum: aquamentum
hoscitans: flans, spiritu alans
130 horonia: inrisiva dictio ut ea vitoperare intellegas
hoscine: hos vero
hocine: hoc verum
homuntio: non grandis forma
hononorat: honore munerat
135 homulus: non grandis forma

humus : terra
humatus : sepultus
humana : motalia

I.

ianuam : ostium, porta
ianitor : ostiarius, custus
iaspis : genus gemmę
iacturam : damno
5 iamdudum : iam ante
P. 126. iacula : missilia tela, id est lancea vel sagitta
iactantia : superbia
Iabin : intellectus
iacit : mittit, iacta
10 iacturarius : qui frequenter patitur damnum aut mortalitate
iactus : iactatus
iapix : velox vel ventus
Iacobus : subplantator
ieiuna : sterelis, infructuosa
15 iecor : interanea, ficatum
ieraticas : sacerdotalis literra aput Egyptos
Iohannes : domini gratia
iocinora : viscera
Ioram : diaconus
20 iubar : speldor vel luciferq· ante solis orto apparet
iugalem : coniugem
iubilate : strepite, cantate
iuba : crista, galea
iuga : capita et summitatis montium
25 P. 127. iurisperitus : legis doctor
iugiter : asidue
iurgium : litigium
iusiurandum : foedus, id est pacis iuramentum
iuglandas : noces maiores
30 iustitium : locus puplicum
iugium : fervitates, captivitates
ictus : percussus
iconisma : imago, figura fine pectore a caput
ideo : idcirco
35 idem : iterum atque iterum
(*rasura*) identide : ipsum per ipsum
idem : et de uno dicitur et de pluribus, ut idem mihi dixit et idem mihi dixerunt
idiota : imperitus litterarum
idioma : prophetae sermonis
40 id ipsum : hoc ipsum
idolum : ex dolo nomen accepit, id est dolo diabuli adinventum
P. 128. ignovit : venia veniam dedit
ignavus : stultus, inprudens
ignarus : inscius
45 ignuminia : infamia
ignovili vulgo : ignota turba
igitur : ergo
ignavia : pigritia, dementia
ignobilis : plebeius
50 ignita : igne accensa
ignominiosus : qui damnatur et de exilio revocatur
ignipotens : Vulcanus
ilico : mox, continuo, statim
Iliaci : Troiani
55 ilex : genus arboris
ilicet : ire licet, scilicet
illinc : de isto loco
imbres : pluvię
imbicelles : dibiles
60 P. 129. immane : acervum, crudele
immanitas : ferocitas, acervitas
impubes : pueri sine barbas
imprumtum : in presentia
inpulsor : concitatur
65 imperium : regalis potestas
impopulavile : inlęsum
impune : sine vindicta
impendum : erogatio
impolitus : ineroditus
70 impos : pusillanimus
impiare : inquinare
immolo : victimo
immotum : firmum
imburio : incurvatio
75 inmensus : sine mensura
imbutus : plenus, institutus
imus : summus, altus
P. 130. immania : ingentia, aspera
immutilata : incontaminata, inconcussa
80 impendit : erogat
impulit : adegit, percussit
impar : inaequalis
impotens animi : elatus prosperitate
impertio : tribuo, dono
85 improcinctu : ex apparatu
impenetrabile : in interiore et inaccessibile
immolat : sacrificat
improbus : inportunus et inconsideratus, inpurus
immitus : inexorabilis
90 immo : potius et quod prius est
immurice : in saxo acuto
immerens : non merito
immoderatus : praeceps
impraecelsum : inexcelsum
95 impraeceps : in imo profundo
P. 131. imperat : accipit
implex : innexa, incorporalia
improcinctu : in expiditione
imprecor : intente precor
100 impensius : largius, uberius
imperitus : indoctus
impubis : investimentibus
imploro : rogo, invoco
improvitus : qui non providet
105 imperitat : frequenter imperat

inadibilis : inaccesibilis
inanimis : qui numquam habuit animam
inbutus : institutus
incompti : inconpositi
110 incula : peregrinus
incolomis : salvus
incunabula : initia infantię
incommoda : inutilia, damna
incolatus : peregrinatio
115 incursationis : impetu
incrementum : nutrimentum, augmentum initium
inclemens : iracundus, impius
P. 132. incertum : inlicitus coitus
incestat : contaminat, violat
120 inconstans : mutabilis
incomitatus : sine comitibus
increpitans : cum ioco minatur
incessere : accusare, provocare
incubuit : appetivit, tenuit
125 inconsultando : in consilio habendo
incidit : incurrit
incidet : peccat
incutet : inicet
incessant : accusant, provocant
130 inauspicatum : sine requisitione
in animum : in mente
inbelles : qui pugnare non possunt
incircumscriptus : terminum carens
incunctanter : sine dubitatione
135 inclitum : nubilem
P. 133. incassum : supervacuum inanem
incentores : inritatores
incelebre : deserto
increbuit : diffamatum est
140 incubat : res alienas tenet
incessere : perficescere, ambulare
inconsulti : sine consilio
incentor : stimulatur
inconditus : inornatus
145 incedit : ambulat, praecedit
inconclavi : in secreto, in penetrabili
inconvulsa : incommutabilis
incuria : necligentia
in coniectura : in similitudine
150 incessum : gressum ambulandi
indeptus : adeptus, auctor adsecutus
indefessa : infatigabili
indigina : habitatur, civis
P. 134. indemnis : sine damno
155 indix : significatur
indagine : inquisitione
indicia : signa, testimonia
indutiae : dilationis
indoles : ingenium, natura, mores
160 individuum : inseparabile
indubies : pax bello manente
indagatio : inquisitio
ineluctabilis : invincibilis
inermis : sine arma
165 ineres : piger, sine arte
ineptia : insipientia, stultitia
inexcita : invocata
incumbet : insistet
inergumina : demuniaca
170 in excessum : in pavore
inedia : fastidium
incentiva : irritamenta, aculei vitiorum, cupiditas
P. 135. inconsequenter : inrationabiliter
in cenoleis : in conviviis
175 incursatione : ininpeto
industria : doctrina, studium
indedit : inseruit, inmisit
indoles : ętas iovenalis qui dolore nescit
indens : inserens, indicans
180 indocilis : qui docere non potest
inductio : persuasio
indiis : mendaciis
indiferens : paratus sine dubitatione
indegestum : inconpositum, inperfectum
185 induviae : indumenta
inexorabibilis : inpacabilis
indoles : certe spei vel progenies incrementum
inergia : pigritia
inexpertum : non probatum
190 ineffabilia : quę non place loqui
P. 136. inexplebilis : insatia*vilis*
inedie : famis, gerinia
inextasi : in excessu
inenodabile : insolubile
195 incominus : in simul
infauta : infilicia
infastis : in ore positis
infit : incipit, dicit, dixit
infititur : negat, non fatetur
200 infidus : infidelis, incertus
infimus : inferior
infestus : iratus, inruens
infetaces : infructuose
infrenis : in reverens
205 infrendimus stringimus
infersisti : intulesti
infulfor : pervasor
infolis : dignitatibus
P. 137. infulae : vitę sacerdotales
210 infanda : nec dicenda, *crimina*
infamis : malę famę
infitias : mendatium
infetiare : crimen inferre vel negare
inficit : tinguit et colore inmutat
215 infensus : inportunus
infectum : non factum vel tinctum, focatum, coloratum
inferie : sacrificia mortuorum
infertat : inportat, minestrat
infrequens : inofficiosus
220 informitas : inconpositio

informamur : instruimur
in furia : in furore
inclubie : gyla
initum : pactum
225 ingenium : naturalis sullicitudo
ingens : magnus
P. 138. ingeminas : iterans, doplans
ingruit : inruit inminet
incluvies : voragines, sordes
230 ingemit : indigne ferit
ingentia : grandia
incruentes : inminentes, incumbentes
ingerit : infert
inglorius : sine gloria
235 inhospita : inhabitabilis
inhians : atton'tus animum ut tentus
inhibet : prohibet, coibet
inhiantes : desiderantes
iniet : coepit, inchoabit
240 inimica : aversaria
inicet : imittet
iniurium est : iniustum est
iniecit : inmisit
initum : pactum
245 P. 139. inlex : seductor
inlicet : seducet, suadit
inluvies : morbus, sordes, squalor
inlivata : intacta, inviolata
inlustrare : inluminare
250 inletabibilis : tristis
inliberalis : malignus
inlustrat : clarificat
inliunt : inlicita persuadēt
inlepidum : insuave
255 innox : innoxius
inexa : amplexa
insuba : quę nulli nubet
innectitur : inligatur
innocuus : qui nulli nocet
260 innitens : incumbens, confidens
inops : pauper, plus debet quod possedet
P. 140. inopinata : subita, inspirata
inormis : inmensus
inpertit : erogat uni
265 inquilinus : peregrinus
inquam : dixi
inquilini : coloni, condititionis
inlexit : suasit
inlabere : descendere, influere
270 inlecebra : inlicitas voluntas, blanditia, dolus
inlicita : prohibita
inlustra//es : nobilis, gloriosi
inludet : irridet
inlectus : seductus
275 inlictant : quod supra
inluxit : lumen apparuit
innoxius : innocens
inni : conati
innupta : incognita vero
280 innixus : incumbens
innomirum : innomirabilem
P. 141. innuit : natibus indicat
inopia : famis, paupertas
inolevit : crevit, innotuit
285 inoromata : visione
inquio : dico
inpendio : erogatio
inquis : sine quiete
insignis : nobilis, magnus, ornatus
290 instar : similitudo, magnitudo
insolens : inportunus
instigat : incendit, inmittit
insons : innocens
insedit : obtenuit
295 insitio : insertio
instipat : congerit
instimulat : invistigat
insolentia : stultitia
insolescit : mutatur
300 insitum : infixum, inherens
insinuat : indicat, nuntiat
P. 142. instantia : vigilantia
insultat : inridat
inscendit : discendit
305 insudandum : sudore querendum
insigne pietate : valde pium
insuetare : insolenter evadere
insignit : ornat, exultat
insuescit : extra consuitudinem efficitur
310 insquitia : rusticitas, inperitia
insolevit : invaluit, inhesit
insigniri : insignem fieri
insolitus : inconsuetus
insolenter : inportune
315 insitus : insertus
insertaba : inserebam
insticnto dei : inspiratione dei
insomnis : pervigilans
instinctu : inpulsu
320 P. 143. instruit : preparat, ornat
insectatus : persecutus
instaurat : reparat, rennovat
insimulat : accusat, fingit
instat : insistit, vigilat
325 instituta : exempla dispositionis praecepta
insolescere : supervivere
insignior : sublimior, nobilior
inspicare : defendere et in modo spicarum concidere
intrinsicus : inferius
330 intestinum : domesticum
intempesta nox : media nox
interpola : revocata
intercalare : interponere
interiit : periit
335 intrinsicus : inferius
intrivera : minuaverat, contriverat
intemerata : intacta, integra, incorrupta
P. 144. intuitur : vidit, aspicit
interritus : sine pavore

340 internusci : cognusci
intimus : interior
interpulavit : interruppit
interlitus : interlinitus
interiit : periit
345 intenti : atoniti
integratio : untio
interceptio : deceptio, fraus
in tempore : in oportunitate
intima : pretiosa
350 intersecta : interclusa
intimabo : insinuabo
intercapito : interiectio
intestabile : sine fede testium
intiger : sanguinem plenus
355 interfabor : interlogor
interpolatus : corruptus varięq ; maculatus vel fuscatus
inteptant : inferunt
intentant : intendunt, minatur
interpellante : reluctante vel inpediente
360 P. 145. interminia : innuntia, obiectus metriatrix
intimat : nodum facit
interfata : interlocuta
intempestivo : non suo tempore
interrex : designatus rex
365 interpalor : varigare
intendando : conto da intendo, aimminandenus quando inter se obliteratur
interlunium : inter prima novissimę lunâ
internuntii : qui inter partes nuntium portant
inter pucula : interępulas
370 interdum : frequenter
intonuit : insonuit
intrio : infundo
interpres : conlectur
intemperantia : ieiuna set inmoderata audacia
375 interdiu : per diem
interrecta : interclusa
P. 146. intertrimentum : si aliqua speties in medio teratur
interlocutio : iudicium
introrsus : introversus
380 internitione : mortem, interitum
interna : interiora cordis
interlitus : intercisio verbi
inultum : iniudicatum
investis : sine barbis
385 invergit : perfundit
invia : difficilior via ubi non est
invisus : qui non videtur
invenus : turpis, ingratus
inumbratur : occultatur
390 invalidus : infirmus
investibolo : in ingresso
invehit : infert, portat
invisere : visitare
P. 147. invisit : ingreditur
395 invisor : invidus
inuret : incendit
invectus : inportatus
invisant : inspiciunt
invium : sine via quod adire non potest
400 inviolatus : intiger, intactus
itritum : vanum, sine effectum
iris : arcus in nube
irritat : provocat, simulat
ironia : dirisio
405 istuc : huc
ite dacus : Danubius
istromates : commentarus scientię [um
Isaurum : Danubium Isterum Danubi-
itidem : aduerbium est temporis quasi iterum
410 itemque : iterumque
itidentidem : iter·uat· iterum
itero : repeto
iterum : item
iter : iteneris
415 Itureus : populus
P. 148. istromatheas : opus variuse ulaciniona et varia diversitate contexto

K.

kalendae : initium mensium vel a colendo dictę
kalibem : ferrum
kalyps : forca poenalis
Karybdis : vertigo maris
5 kalnes : galeę militum
karitrius : genus avis et est albam et pinnae ius non exuritur

L.

Latio : Italia
Latini : Romani
lar : focolar intra domum
larva : malificus, incantatur
5 larvalis : daemoniosa
lacernum : stola, vestis
lavitur : cadit
labus : labor
Laverna : dea furum
10 P. 149. lanista : macellarius qui carnis ferro laniat et magister glatiatorum
lata : prolata, praedicta
laqueare : camera laqueata
lapicidina : locus ubi ceduntur
latrina : recessus
15 labe : sorde
lacerum : laniatus, dibilem
laquearia : domorum tignaria
lacunculae : laterna id est vasa lucernę fictilia

labentes : cadentes
20 lactat : decepit leniter
late : passim, ubique
lapsantem : serventem
Latio : Latinorum
lavefactare : subvertere
25 latebra : locus absconsus a latendo
lacertis : musculis braciorum aut genus piscium
lampene : stelle fulgetes
lactasis : metaphoras ab infantibus
P. 150. lampas : facula
30 lamnas : animal similis pardo
latex : aqua quę latet et inveniuntur
lautumia : costudia carceris
lacessit : lacerat, provocat
lanugo : prima barba in similitudine
35 latur : portatur
lascivia : voluptas animi
laberna : ferramenta latronum vel qui filius alienus seducet
latura : datura
laverna : homo qui filius alienus seducet id est latro
40 lacunę : fossę
lacit : captat suadet
laciniosum : pannosum
lacunaria : pendentia luminaria
laurigeris : laurum portantes
45 lacunaria : camere
lautitie : munditię
Latium : autem dictum est locus in partes Italię quo Aeneas Tornus
P. 151. lancis : missurias
larvę : umb simulacrum
50 lavillis : lubricus
lascivus : luxuriosus
larantes : arantes
lascive : fervide
laicus : popularis
55 laris : genus avis guia
laqueare : vincire, alligare
lavitur : solvitur aut cadet
latibulum : defensaculum
lances : pondera, mensurę
60 lapite : cruciat, sollicitat doliter
latomus : lapidu cęsor
legio : numerus sex milium hominum
legunt : colligunt
legale : legitimum
65 legitima : iudicia, praecepta
legata : testamenta, donata
legomartia : numirus militum quasi Marti consecratus
legatum : donatio defuncti
legatus : internuntius
70 Leofilus : leonis filius
P. 152. lectica : qua consoles portantur
lebetas : caccavoseneos
lectores : apparitores
lecticalis : qui lectulum facit
75 lebissata : genus marmoris
lena : vitiorum seductrix
lenta : flexebilis
lenocinia : seductionis, persuasionis
lentetur : otiose fiat
80 lepus : blandus
leno : seductor et praepositus meretricum
lentus : tardus, lenis
lenit : pacat, blandit
lenocinium : uxoris meretricatio mariti consensu
85 lepus : blandus
lepidum : pulchrum, unestum
leporem : blanditiem, dulcidine, decore
lepidum : pulchur, honestum
lepidus : tener, mollis, delicatus
90 leptopyria : minute febris
P. 153. Lerna : paludes aquę ubi fuit ydra serpens, qui multa capita habuit
Lerneus : ut anguis in Lernatus
leargus : vitium quo conpremuntur egriad falsum somnum
lenicavis : lenivis, dealbabis
95 Lebbeus : circulus id est a corde ipse est deus ipse est et Iudas Iacubi
libo : sacrifico, offero
Lilibeus : promunturius
libertas : ingenuitas
libare : est aliquid lebiter
100 Libani : potentes sęculi et fortes
Liburnus : grandis navis
Liburne : accule Atriatici maris
libumina : sacrificia, incensa
libavit : degustavit, sacrificavit
105 libitinia : lectus mortuorum
libat : fundit, sicilę
P. 154. libiralis : munificus, largus
librat : pensant, equant
libetima : arca ubi mortui condiuntur
110 liberalitas : donatio quę fit a divitibus
liberaliter : humaniter
lictores : qui fasces ante iudices ferunt
licitatio : proposita vinditio
licessere : licere
115 licitacio : quotiens aliquis vinditur, et emptores super se augmentum faciunt
licetur : de praedio contenditur
lictor : apparatio
licentiosa : maiorum mancipia quo multa licet
licitatio : promessio, sponsio
120 licenter : licite
lienum : vinum
ligula : arguta, loquax
Liguria : provintia Italię in qua est Mediolanus
ligones : rastri, bidentes

125 P. 155. ligustra : genus floris croco-coloris
limis : finisterminus
limitata : terminata
limat : mulcet
limpido : puro
130 limnis : strabo et oblicus oculis
lymphaticus : fantasticus qui quasi ex aqua divinant
lymbus : circuitus quoiusque rei, ut ora maris
linchine : candelae
linquet : relinquet, deserit
135 linquuntur : defluunt
lincis : bestia varii coloris
linter : navicula modica
linquit : peccat, dimittit
liquidum : splenditum, lucidum
140 liquet : patet, claret
lyra : genus cithare
litat : sacrificat
litargus : somnulentus
lita : imitat
145 litaus : tuba longa
litigium : scandalum
litigatio : causatio
P. 156. lixa : aqua dicebant antiqui, unde elixare dicitur
lotus : libatus
150 loquacitas : multa locutio
locavit : collocavit
longiturni : longevi
longo limite : longo ordine
logium : quod est rationale, pannus exiguus ex auro gemmis coloribusque variis qui super humerale contra pectus pontificis utebatur
155 logica : rationalis
logisticum : cogitabilem
luculentum : luce plenum
lucus : eo quod menime luceat
luctum : planctum
160 lucar : in urbe Roma et rogatio que solebant in lucis fieri et vectigal
lupanar : habitatio meretricum
ludificat : inludit
P. 157. Luperci : pastores qui sacra incubi nudi colebant
lumina : oculi
165 lustrum : quinquenium
lustrat : circuit, peragrat
luis : persolvis poenas
lutenes :
Lucelleum : genus marmoris albi
170 lucifer : stella quę ante luce apparit
ludibrium : dedicus et quod inluditur vanitas
lubricus : elavescens
lupanaria : cella meretricum
Lupercalia : gentium cultura id est sacra panis qui ipse dicitur
175 luridum : sorditum, pallidum
lues : pestis, morbus, dilubius
lurconum : devoratorum, gluttonum
luscina : aves quę bene canit
luxus : pompa regia et luxuria
180 P. 158. lumine turvo : diro hae truculentum vultum
ludicrum : ludibrium turpe
Lucas : ipse consurgens, sibe ipse libans

M.

macte : magis aut tam magis
macies : exiguitas corporis
Maceti : Macedones
magalia : loca pastorarum
5 madet : humet
magnanimus : fortis
magnites : lapis qui ferrum rapit
maius : plus, amplius
malum punici : mala granata
10 mallatia : mollities, grę
malagrama : herba venenosa
maialis : porcus pinguis eo quod de his Maie sacricabantur
pp. 159 and 160 left vacant
P. 161. mancipat : manum mittit et sociat
manua : manipula
15 mansa : comista, manducata
mandemus : cometimus
mania : furor, insania
mane : persevera
manes : inferorum anime vel sepulcra
20 manipulus : numirus militum brevis
manipulus : unde et mapuli dicti fasces gremiorum quod manu capinantur
manuale : orarium
manicat : mane surget, per manu tenet
mansuevit : mansuetus factus est
25 manubię : pręda de hostibus
manūcapta : id est spolia
mandavi : tradedi
Maburtia : res quę ad pugna pertenit
machinatur : parat, instruit
30 macilentus : macer
maior natu : senior
P. 162. maculosus : pullutus
mapalia : ex sę pastorum
madefactus : humefactus
35 magnificus : magna faciens
magnanimitas : fortitudo banimi
maleatur : faber ferr̄
machinationis : commenta a studii
Maria : in luminatrix vel domina
40 marsuppium : sacellum
margine : extrema parte livere
mastia : malus serbus, serbus nequam
matertera : matri soror
mavis : magis vis
45 Maurusia : Mauritania
mavens : durans, perseverans

maranathema : in adventum domini
P. 163. maiurolit : xii. signa mathematici asserunt
marcet : languet
50 martirium : testimonium
marrina : potio divina
mastigie : taurie flagella
mattus : trisus
matrinus : matri frater
55 matertera : magna soror aviae
mavisse : magis volo esse
marcus : excelsus, mandatus
Messias : unctus id est Christus
melus : dolcis sonus
60 meditulium : medius locus in campo
melotes : pelles ovinas simplix qua monachi uduntur ex uno latere
P. 164. meliusculum : modicum meliorem
metatur : habriatur, locatur
Melopeus : quasi carminis facitor
65 mensum : mensuratum
meat : manat, decorrit, ambulat
menstrum : subaudis tempus unius mensis
Menalias : pastoralis
meritoria : loca tabernaro ubi adulteria comminantur
70 mero hanima : simplici, sincero
mersat : merget
metiri : mensurari
mercimonia : cummertia, negutiationis
Menedes : Balię pars
75 mergitis : fatię utspinarum
P. 165. mermis · formica
melicus : poeta carminum lyricorum
mediastinus : balneatur
medustinus : balneatur
80 metacastor : ita mihi propitius set castus
messala : agricola, messor
melops : bonus cantor
mensis commodus : September mensis
mergi : fus es quibus messis colligunt
85 melopeum : dulcem, conpositum
mercedarius : qui mercedes dat pro labore
Micepsa ; vifuit Numidarum
minitatur : asidue minatur
minax : minas tendens
90 minicius : ericius
mimologus : qui mimos docet
P. 166. Milesiae : amatorię geste
minas : altitutinis propugnaculum
mitra : corona et amictus capillorum
95 minsare : sepius mingere
myrmiceas : verrugas corporis
mysterium : occultum praefigurado
mitis : mansuetus
missele : telum quod mittitur
100 miscelluneum : cumixtitium
miscentur : praeturbantur
Minotaurus : monstrum qui capite taurino et cetera partis corporis homo fuit, a Minoe rege et a tauro, quia ex utraque mater fertur semina suscipisse
P. 167. missitat : frequenter mittit
missicius : qui militia exibit
105 missos nos facit : demitti nos
miseranda : misera, infelex
migma : palea minutarum
mioparon : naviculas cava pyratarum
Mihahel : qui sicut deus
110 modifica : modolata temperata
modolatio : dolcido vocis
modestus : moderatus, rectus
modestia : verecundia
moechia : adulterium et omne inlicito concubito
115 modus : mensura, ordo
modolatur : formatur
P. 168. modolant : librant
moderatio : temperantia
molis : magnitudo, vastitas
120 mollit : mitigat, placit
molosi : canis magni
molimina : artificia cogitationis
molles : vani
molior : dispono, excogito
125 molitur : disponit, agit
monachus : solitarius
P. 169. monachosmum : genus vehiculi quod ab uno iumentum ducatur
monogamus : unius uxori vir
monarchus : singularis rex
130 monomentis : memoriis litterarum
mons Tarpeius : Capitulium
momentum : stilus in comenta
monumentum : memoria
monilia : ornamentum in capite molierum vel pectore quorum
135 monopolium : ut ubi una res venditur
monarchia : principatus singularis
monstrum : deformitas membrorum et prodigium adversum
P. 170. monoceron : quadrupis unicornuus
monimenta : auxilia
140 monadem : unitatem
mulcet : dilectat, blanditur
mulcra : vasa ubi lac mulgitur
mulgatores : peremptores
mulosus : canis rusticus
145 mulcat : pugnis vel calcibus cedit
multatio : damnum pecunię
multatus : condemnatus
multifarie : multiloque multi sermonus
mulcero : limo, plano, mitigo
150 Mulciver : Vulcanus
Mulciver : ignis dicitur eo quod omnia mulcatur

P. 171. munifex: munera distribuens
munimen: defensio
munera: officia, bellorum tributa, firmitas
155 munificus: honorificus
mundus: celum vel terram
municipium: mansio q̃ muros
murex: regalis porpora
municeps: unicus qui accepti muneribus edificatur vel princeps primus
160 munusculum: modica donatio
munitabitur: munietur
munificentia: libertas libera
munimenta: testimonia murorum
munituria: precinuturia
165 *munium: quasi manufactum sic et muri a monicione*
P. 172. municipium: quod iam accipiat munera id est offitia
murice: coclea marina
munia: munera qui militibus dantur
murice: frutices virgultę et saxa acuta in montibus
170 mussim: lente
museleu: monumentum
mussat: silentium murmurat, dubitat
musitanter: leniter
musia: nidi suricum
175 muscepula: temptatio, laqueum
murquiso: marmuratur, fallax
musitat: frequenter murmurat
mutilat: placitum violat
mutilo: inmino, violo, sautio, frango
180 P. 173. mutilum: truncatum
mutturci: stulti, inertes

N.

nabo: rescendo
nabat: natabat
nanciscitur: potitus, inventus
nare: natare
5 navarcus: navi magister
navilia: loca in qua nabis educantur
nando: natando
naviter: strenue, stutiose, fortiter, uteliter
Nazareus: sanctus
10 nablum: quod Graece spalateriū
nanctus: adeptus, inventus
nant: natant
P. 174. navale proelium: nātica pugna
nauta: nauta · naus · obsequens
15 navales res: ad nave pertinentis
navus: vigelans, celer, industriosus, celer
navit: strenuit agit
napeus: navium magister
navare: strenue officio facere
20 nativum: genetivum
navatoperat: datoperat
natrix: serpens
nat: natat
natice: non est
25 nardum: pysticum
nardum: fitelem, id est sine fraude
narrat: nuntiat
P. 175. nectar: sapor vel odor summae suavitatis, vel potio deorum et vitam
nectarius: odorifer
30 nebulo: latro, mendax
necopinans: nec sperans
necessitudo: dilectio, amicidię
nectere: inmittere
nefas: scelus invitia
35 necromanticus: evocatur umbrarum, aut mortuorum divinatio
nenia as: vilissimas fabulas
nequa: malus
nequivit: non potuit
nefastus: nefarius, nequissimus
40 P. 176. Neomenia: novellionium, Kalendę
neophitus: novella plantatio
neunt: colligunt
nentes: fila torquentes
nexus: nodus, ligatura
45 neutrum: nec illum nec hoc
nepa: vipera
necnon: sedet
nevum: macula
necne: vel non
50 nebris: corium cervi
nectit: alligat
nefastus: scelere pollutus
nefarius: sceleratus
negromantia: quotiens hanimam ab inferis revocatur vel divinatio monstrorum
55 P. 177. nequiquam: nec modicum
nequeo: non possum
ne quarta: crudelis in loquendo
nēquaqua: nullo modum
nemus: silva
60 ne: ergo
nepos: prodignus eversor
neotrici: novicii, minores
neuter: medius
neve: ne forte
65 neque: non
Nereis: nympha marina
neerant: flaverant
nempe: certe, utique
nevet: filat
70 neto: torto
nex: mors a necandi
P. 178. nectari: ocultorum frequentia aperiri
necti corax: noctua avis
nenia: carmen funebre

75 nepa: prius in sideribus
nibarus. splenditus
nictit: canis cum acute gannit
nimbus: tempestas, pluvia cum ventum
nimboso: tempestuoso
80 nixe: munite
nidor: splendor
nimphaticus: arreptitius
niveus: canditus
ni: nisi, non
85 nidores: odores
nis: nobis
nimborum: nubium
nidor: odor
ninnarus: murio cuius uxor adulterat et ipse tacet
90 P. 179. nititur: pugnat, conatur, temptat
nimpe: nonne, utique
nisus: conatus
nigelli: nigri
nimirum: sine dubium, certe
95 Nicolaum: stultum
nectura: genitura
Nilicula: Aegyptius
nimpha: virgo celestis vel numina
nitens: incumbens et splenditus
100 nitelle: nitores parvi
niquid: nisi quid
nympheum: silanum
nisuper: proxime
nimpha: dea aquarum
105 nixus: incumbens, curvus
nitet: splendit, lucet
P. 180. nosochomium: locum venerabilem in quo infirmi homines curantur
nostratium: nostrorum
nonnulli: aliquanti
110 Noti: venti
nothus: spurius de adulterium natus vel incertus
norat: sciebat
nos satius: nil hominus, tanto magis
noxa: culpa, peccati rea
115 nocticula: luna
noxius: nocens
norma: mensura, regula
noxius: tergiversatur
nox umada: tempestas cum pluvia
120 non potative: non dubium
nomencolatur: nomen officii
num: numquid
P. 181. nutu: voluntate
nutatio: irae minatio
125 nuncupat: nomen vocat
nuper: modo, ante tempus
nutans: vacillans, pendens, titubans
numen: potestas, magestas
nugas: inutilis, vilis
130 nugacitas: vanitas, insania
nuit: annuit, promisit
nurus: uxor filii
nusciosus: qui plus vepere videt
nutibus: gestibus
135 numquis: numquid aliquis
nummolarius: nummorum praerogatur
P. 182. numisma: nummi percussor, id est donarius
nundinationis: mercationis
nundina: mercatum
140 nuberca: matrea id est matrima

O.

obediens: dicto parens
obsecunda: obtempora
obitus: mors
obiit: mortuus est
5 obeuntia: circumdantia
obelo: linea
obice: repelle
obices: oppositionis
obverto: in alia parte verto
10 obessus: pinguis carnibus
obolum: dimidium, scripulum
obici: repelli
P. 183. *obici: rep*
obet: moritur
15 obeundi: exequendi
obicio: oppono
ob: propter
obest: contra est
obans: gaudens
20 obiurgat: oppugna, castigat, increpa[t]
obdat: opponet, praeligat
oblicus: non rectus vel transversus
obliteratus: oblivione obscurum
obliminat: limpidat
25 oblectat: dilectatione infundit
oblata: offerta
obliterat: oblita
oblustrans: circumspiciens
obliteratio: oblivio dilata
30 P. 184. obnixus: humiles, incumbens
obnixius: subiectus
obnixii: subditi, rei
obnubet: obteget
obnueret: obtexerat
35 obortis: subito ortis
obsinatiomentis: duritia vel intentio
obstipium: contrapositum
obstupita: mente turbata
obsolitatus: inquinatur
40 obstructum: preclusum
obsecrat: deprecar, rogat
obstinatus: disperatus, inrevocabilis, obduratus
obsilitus: sorditus
P. 185. obsecunda, obsequitur

45 obscenum : fędessimum, turpem
obsessus : circumdatus
obtestatur : adiurat
obtusa : praecessa
obturpuit : infrigitavi, obstipuit
50 obtunsus : obcecatus, clusus
obtundentes : abscondentes
obticuit : ommutuit
obtutus : aspectus inmubilis
obvallatum : undique munitum
55 obluctor : contra luctor
obnites : reluctans
obnuit : operuit, obtexuit
P. 186. obnixe : intente
obnuit : aperit
60 obnutus veste : circumdatus veste
obnuto : obluto, obterito
obnectere : conligare
obstrepit : inpetit
obsita : obtecta, circumdata
65 obsillagis : marsus
obstat : contra dicit
obstipum : oblicum, inaequalem
obsunt : contra sunt
obserat : claudit
70 obsessit : subripuit
obsistit : obviat
P. 187. *obturat : obcludit oppilat*
obstetrix obstetricis : quę parturientibus praeerant
obtrunco : interficio
75 obtrectans : resistens
obtundere : prohibere
occipit : incipit
obsistet : obviat
occubuit : interiit, mortuus est
80 ocior : velocior
occasus : finis
occursat : sepius occurrit
occulit : abscondit, occultat
ocreas : tibialia
85 occipitium : posterior pars capitis
occentare : contra cantare
occulluit : occultavit
P. 188. *odas : cantatio*
odeporicum : itinerarium viatorium
90 odeum : a cantu
ode : dicitur cantatio
oe : conpellatio personę
oeconomia : dispensatio
oestrum, genus tavani quod boves habent
95 officium : obsequium, minnesterium
offa : pars frusti rotundu
officit : obstat, nocet, tinguet
olli : illi
olus : olera
100 oletores : ortolani
olfacere : odorare
olim : aliquando, antiquitus
olimat : limpidat
olores : gigni
105 olitana : vetusta
olor : gigni
olympum : caelum et nomen montis
odas : cantatio
P. 189. olografum : totum praescriptum
110 omelia : popularis tractatus, grẽ
omnopere : omni virtute
o : auguria
ommitto : pretereo, dimitto
omousion : unius substantia
115 omoeusion : similis substantia
omentum : mappa ventris
omen : quod homo somniatur, auspicium, auguria maiora
onera : sarcina
onestum : graviosum
120 onix : gens marmoris
ongriforum: lucta ferens
onocrotolus: genus avis est quod facie gerat asini nam stulta facię, sed obducta grotalus dicitur
P. 190. onicinum : genus lapidis
onustum : gravosum
125 opacus : umbrosus
opem : auxilium
opere precium : necessarium
operiens : expectans
oppedum : castrum vel civitas sine murus
130 oppetere : occumbere, mori
oppidanus : civis ex oppida nam oppidaneus Latinum est, aput antiquus oppida dicta sunt quod opem dare
operit : celat, vetat
opifex : operis factur, artifex
opimus : fertilis, saginatus
135 opitulatur : adiubatur
opido : valde, vehementer, oportune, omnino
P. 191. optimatus : optimarum artium auctor vel princeps
opinor : existimo
opter : propter
140 opinatores : existimatores
opilio : minor pastorum pecorarius
opobalsamum : lacrima balsami
optio : electio, potestas, arbitrio
opacant : obumbrant
145 oppetit : obiit
opes : divitie
operosa : ingentia certamina
opessulatum : clavem obserratum
opproprium : malum crimen
150 opima : ampla, magna
opitulantia : suffragia
oppidum : mansio sine curia vicina
opiter : natus avo paternon vivo post patris morte natus
P. 192. opniparum : beatum, opulentum
155 oppilat : obturat, obcludit

opitis : genus marmoris
opinatissimum : nominatissimum
oportunus : necessarius
opulentus : divis
160 optigit : sorte evenit
oro : rogo, peto
orator : eloquens
orditor : incipit
ortus : natus
165 orbitas : amissio filiorum
oridurius : aspere loques
oroma : visio somnii
orbita : vistigia rotarum instrata
oris : finibus regionis
170 P. 193. orsa : cepta, locuta
oracula : responsa, precepta
orba : sine parentibus
orbatus : filiorum amittens
ora : finis, vultus, et extrema vestis
175 oriundus : natus, ortus
orei : regionum finis
orgia : misteria secreta
Ortosegia : dolus insula
ortigo metrum : cuturnix
180 ortho doxus : rictus gloriae
ortigometra : coturnices
orosscopus : circulus signorum
oreagra : fuscinula gre.
P. 194. osanna : salvificat vel sulvum facit
185 ostentatum : monstratum
ostentum : signum quod ostenditur
osurum : oditurum
os : orii
osor : inimicus ab odio dictus
190 ostentat : ostendit
os : ossis
osus : odiosus
oscine : aves quod cantando auspicia faciunt
ostentatura : ostensio insolita veluti sifiant in nocte repentina lux

P.

pasciscit : pactum facit
pactum : decretum
pacus : collegio curiae
pabulator : pastor
5 *phalax : acies militum*
P. 195. pactio : conibentia
pactorium : plantatorium
paganitius : ut cultus
pagmat : desiterat
10 pagus : possessio est ampla sed sine alique iure unde et paganos dicimus alienus a iure vel sacris constitutis
pagi : memoriis sine idolis
pagmentes : desiderantes
pauxillum : paulolum, modicum
palestra : exercitatio ubi athlete se exercebant
15 palmatus : coronatus
paliurus : spina vel genus palatemas secari carum cardi spinosi
P. 196 left vacant
P. 197. palpat : fovet, blanditur
palteum : murum, fastidium
paululum : aliquantulum
20 Palea : dea qui pastores colebant
palantes : fugientes in diviso
palla : Minerva et amiotō muliebri
palmòla : extrema pars navis
palare : errare
25 pala : puplice, coram
palabundi : errantes
palmas : victorias
pallantes : gaudentes
paulisper : aliquantisper, paulatim
30 palutamenta : ornamenta (cf. p. 199)
P. 198. parilitas : aequalitas
parma : scutum parvum
parasituli : bucellatarii
pacus : cupidus, abstinens
35 parastus : paratus inuria facere et pati
parpata : copidus
parasitus : qui iocos facit ut ventrem impleat
parumper : per parum
paraclitum : consolatorem
40 pari : similem
paradigma : similitudo, fabula
parentia : oboedientia aperiendo
parentat : umbris vel tumulis mortuorum frequenter paret id est obsequitur aut minestrat
P. 199. militum unde hii qui in provintia proficiscunt paludani vocantur
palpidat : temptat
45 palantur : vagantur
paralypuminon : relico, quod restat
parsimonia : frugalitas, abstinentia, parcitas
parabula : similitudo
parasceue : prępparatio grēc
50 parta : inventa
parata : quesita
parsurus : parciturus
parumpendet : nihil iudicat
parmucupula : medicamenti vinditur
55 parentalia : dies festi panorum
particus : necutiatur ipse
Paridis iudicium : quod in tres deos
P. 200. iononem, venerem, minerva Paris pastor damalo aureo iudicavit
parris : lapidis canditus
pariliter : aequaliter
60 parricida : qui parentes uo occidit
paracya : adiacens vel incolatus
Pharisei : divisi, separati

paradoxus : qui se ad gloria parat
parce : exugue, continenter
65 parochia : adiacens id est didomus
pantomimus : summus iocularis qui omnes ludus novit
panera : rapina
pansa : aperta
pantera : ritia
70 panicinum : genus vestis
pantheus : quasi omnium deus deorum
P. 201. pandictes : omnia ferens et veterum et novorum testamentorum
pangunt : disponunt carmina vel coniungunt
Pan : ingibus
75 paniceum : roseum
panigerici : adolatores
panseus : qui pedibus in diverso tendetibus alat
pastoforium : atrium templi et sacrarium
pastinantes : plantantes
80 patrius : paternus
patibulum : crucis passio
patula : aperta, expansa
patera : fyala a patendo
patravit : perfecit aut commisit
85 patologia : passionis ratio
P. 202. *Fratruus : frater patris*
papiliones : tenturia modica
patogomo : genus morbi
pascha : transcensus
90 patruiles : filii frater
patruus magnus : frater avi
paulus : mirabilis
papilla : summa pars mammille
placito : tranquillo
95 plausum : risum stultum
platea : via spatiosa
plastrografis : falsis scriptis
plancus : pedibus latis
plagiatores : seductores
100 plagat : mitigat, sedat
plaustra : carra
plagiarius : qui peculim aut mancipium alienum seducendum distrahit
P. 203. plantasia : orto vel pomaria
plaudete : iubilate
105 plaudit : manibus sonum facit
placenta : dulcia
plectitur : punitur, percutitur
plebicula : amans civis
plexus : percussus, truncatus
110 plerique : aliquanti
plebēscitat : plebem adloquitur
pleades : stelle
plectrum : percussorium cythare
plerique : alicotiens
115 plebeiu : popularis ominis sine aliqua dignitate
P. 204. *prefertat : pręportat, ante latat*
plethora : plenitudo
prestigia : fallatia
prestolat : expectat
120 prefata : antedicta
pręsagus : prescius
previligium : quod iure devetur et primus honor seu lex non poplica sed privata
pręsagium : signum quod antea deus postea venet
precordia : cor est
125 prędignus : ante natus
pretervolo : volociter praetereor
preconium : praedicatio alicuius rei
P. 205. et laus antecedens
prerogativum : beneficium ante oblatum
prelibabimus : aliqua contolimus, aliqua diximus
130 pręcelerat : antecedet
pręsagium : divinatio futurorum
pręse tulit : plusquam oportuit tulit
prępedit : impedit
prępetes : aves quae volantes auspicia faciunt
135 prępopere : inordinate et fistinanter
pręscriptum : paesti tumi
prępos : percussor velox
pręforibus : ante ostium
prestigiaverunt : ludificaverunt
140 P. 206. pręsidium : auxilium
pręses : iudex a presidendo
pretenta : anteposita
pręcavit : antecavit
prelibundo : pregustando
145 pretervehor : transnavigor
pręssant : sepe praecedunt
prędia : fundi, villae
prevertitur : antecedit
pretexit : celat, coperit
150 prevignus : filiaster
praefatio : prae alocutio
prestantior : melior
praeterea : extra hęc
presul : princeps cuntis praepositis
155 P. 207. prediti : instructi, antepositi, potentes
prępes : aquila
pretores : secundi sunt consolibus
pręsertim : quam maxime
pręus : antecedens
160 prerogans : ante inpendens
pręs : fede iussor
prepoperum : antea factum quod erat postea faciendo
prelo : torcular
pręcipitat : ab alto deicet
165 pręcox : prematurus
prędes : fidi iussores
prelus : modicus

prerepit : ante rapit
P. 208. prepostera : perversa, in posterum quod ante debuit
170 praestruxit : praeordinavit
prĕcipuus : perpinguis
praerogativa : excellentia meritorum
prĕpollit : eminet, supersplendet
prĕquoqua : celere maturans
175 praecipue : maxime, ante omnia
praesidarius : auxilium praebens
prĕrupto : elevato, alto
prĕceps : festinus, temerarius
praetestatus : infans qui de praetestato patre nascitur
180 prĕpes : praevolans
prĕlati : antepositi
prĕpetibus : antepetentibus
P. 209. pectet : pectinat
pecua : armenta et pecora
185 peculatus : qui pecunia puplica furat
pecudiarius : pastor
pecudes : oves
pedor : odor gravis
pedora : aurium sordes
190 pedagogus : eroditor puerorum
pellecti : inlecebrati, seducti
pellexit : in fraude induxit
pelica : concubina
pellectum : suasum
195 Pelorum : promunturiorum
pellax : pervera loques
pegaso : homo iocularis
P. 210. pecuratus : habundan pecoribus
peiera : falsum iurat
200 pelagu : carina, navigium amnicum
pecuosus : qui multa pecura habet
pedatum : carcere
pedidatus : propagato filiorum vel nepotum
pedore : foedore
205 pelicet : inlicite circumvenit
pellace : dolosũ, mendace
pellector : persuasor
pellex : succuba, quae lo alterius nubet
pelusit : distulit
210 peltat : scutum amagonicum parvum
penum : cellarium, promtuaria
penades : domus vel focus
P. 211. pendolus : elavatus
penes arbitros : aput iudices
215 penula : lacerna, stola
pendeo : fabeo, blandior
pentamerum : versus quinque pedum
penis : natura, pudenda
penitralia : interiora, secreta
220 pedere : existimare
penetrat : inrumpet intra, pertransit
pene moti : cito egressi
pentomen : circumcisio
penuceo : rubeo
225 pene : prope, iuxta, secus
pensio : praecii persulutio
penate : imago pulcerrima
pepulit : expulit, inpolit
P. 212. pepegit : pactuatus est
230 peplum : stola, vestis muliebris
pepo : melone
peplus : vestis simplex qua Minerve simulacrum velatum est
pepones : melone
pernix : agilis, velox, celer
235 perpetes : aves, volantes
pernicibus : velocibus
permulcit : lenit
perpetimur : patimur
peribulum : deambulatorium vel bilua marina
240 percensit : considerat
peculit : perturbavit, adicit, percussit
P. 213. perpetitur : patitur
perplexus : involutus, temidus
pertemptat : perquiret
245 perstans : praeverans
perduellio : rebellatur
perpolit : coegit
permotus : turbatus, excitatus
percunctatur : perquiret, interrogat
250 perbabitur : decurrit
perniciosus : a pernitendo qui dat operam, opera a perdendo aliquem et pernicies dicitur
permultatum : in omnium notitia intimata
perfunctorie : imaginarie, transitorie
petros : agnoscens
255 pernicitas : velocitas
P. 214. perpetrat : pe agit committit
perpesitius : qui frequenter aliquem patitur
perper : perpetuo
peremptus : interfectus
260 persistet : perseverat
perpende : perpensa, equat
periti : docti
perendie : pus cras
perfunctus : transactus
265 perniciter : velociter
perhibet : pernuntiat
peresum : comestum
pertulit : perturbavit, perstrabit
perlustrat : pervidet
270 pergenuat : genibus pergit
persum : deorsum precipitatum
P. 215. perimet : interficet
percrebruit : personavit, puplicatus est
perspicuum : manifestum, splenditum, pulchrum
275 perfidus : qui fidem rupit semel
perfidiosus : qui semper
peripsima : humillima atque subiecta
perduellis : rebellionibus
perosum : odiosum
280 pertinax : perseverans

perfugium : locus refugii
pervicax : valde verbosus, intentione durus et contumax
percitus : provocatus
perpetim : prolixum, continuum
285 pernoscere : tractare
perc"lum : experimentum
pereronia : per inrisione
P. 216. perdocilis : valde docilis
perennis : aeternus
290 perlata : tolerata
periscelide : crurum ornamenta aput feminas
percellet : pervertit, evellit
perspicace : vigilant . . rem
pertinacia : duritia
295 per . . . . . : transitus
peripsima : purgame . . . m
persulto : vocifero
perfruitur : utitur
pernox : pernoctans pervi.gelans
300 pertensum : tediosum, permodestum
perfungitur : oficium unius complet
peragrat : circuit, curat
perstromata : tignina acubitus
persuma : praecipita vel confecta
305 P. 217. perfluxum : dificile
persentisca[t] : ex totum sentiat
perpexa : perligata
Pergamum : Illium et hili
perpera : prave, perverse
310 persolla : persona minor
pessum : violenter oppressum
pessolum : clustellum
pestilentia : interitum
pestis : pernicies
315 petalum : area lammina tenuessima
pia : religiosa
piare : solvere
piaculum : scelus et peccatum impie commissum
pignera : filiorum sunt
320 pilant : battunt confirmat
P. 218. pitidine : id est prostitumatum
pipa : vicitatus, q̃ritat passer
pituita : flegma
piceo : nigro
325 piniculum : sfpongia
pixides : vasa modica argentea vel lignea quas vulgus buxides dicunt
piraticus : subaudiens ut carcer
Philippus : os lampadarum
pyrada : latro marinus
330 piabunt : placabunt
piacula : placationis mortuorum
pilo : asta rimana
pilarius : sepulcra egyptiorum
pinna : fastidium templi, muri
335 P. 219. Pyra : ara lignis altioribus conposita quae, cum adhunc non ardet, rogus dicitur, cum vero arde, pyra dicitur Greci pyr igne
pistrix : genus bystie marī
piacularis : hostia quae offertur pro peccatum
pictae : quibus raduntur capita et tegunt se corium crudum
pignora : creditoribus danter
340 privignus : filius uxoris alterius
primilum : numerus militię primo probatus
pristinum : priorem, antiqua
privat : subtrahit
primor : prior
345 primores : priores
privis : singulis, privatis
P. 220. pridiae : heri
pospridię : odię
primoperum : genus officii
350 priviligium : privata est lex quae ad te pertenet tantum
prisca : antiqua
prima quies : primum somnum
primignus : primogenitus
pridem : antea, dudum
355 primordium : initium
primivirgius : cavallarius quod prima est militia ipsius in visgis
poa : genus herbe ubi vestimenta labantur
polum : caelum
poederes : sacerdotalis linea
360 pollulat : germinat
P. 221. polluit : inquinavit
polenta : genus est liguminis
pollinctus : ultimum honore affectus, id est honoratus
pollit : criscet
365 pollens : crescens, florens vige"s
polinton : ubi kadavera ponuntur
poema : carmen poeticum
poenates : dii quasi domestici
populatus : prędatus, vastatus
370 poplites : genicula concavum
portentum : signum futurarum adnuntius
porrecta : undique extensa
porro tenus : usque porro
posteritas : propagatio filiorum
375 posthabita : postposita
P. 222. postridie : cras
postulatius : petitor rogatarius
poesi : materia totius carmi in qua poeta versatur
potitur : frequenter utitur vel fruitur
380 potius : melius, magis
pothochotropis : locus in quo pauperes et infirmi homines pascuntur
pomet : statuit
pollicetur : promittitur
pompulentus : pompa plenus
385 ponetergum : pos dorsum

pollinctores: qui mortuos sepelliunt
popularitas: multitudo populi
poples: geniculum generis masculini
podix vel podice: facedenica id est anum vel culum
390 P. 223. porro: postea, utique
portendit: significavit, longe ante ostendit
poetria: femina poeta
postulat: petit
postliminium: qui post captivitate reversus iuraque admiserat recipit
395 pomarium: ubi poma ponuntur
pomerium: locus proximus mari
poeticus: canticus
potitus: adeptus, consecutus
petior: fruor et potentior
400 potissimum: meliorem
potiri: adipisci
potor: bibutur
pondo: libras xii
P. 224. prope: bene
405 probrum: turpitudo vel malum crimen
probrosum: turpia
probitas: iustitia, bonitas
problema: propositio
proba: manifesta, optima provata
410 proci: petitores uxorum
proculus: qui patre longius peregrinante nascitur
procax: inportunus, inprobus
procerum: altum pro longum
procul: non longe
415 procas: qui post morte patris nascitur
proclivi: facere parati
proclientibus: pro sociis
P. 225. proceritas: altitudo, longitudo
procella: tempestas, venti subitu
420 proceres: primati, nobilis
proclima: adclina
proclivio: humiando adcumbet
proemium: prefatio
prodigia: signa cęlestia mala pronuntia
425 prodi: exi
profecto: vere, nimis, aut sine dubio
profana: pulluta, violata
profligatus: perditus
profatus: proloquitur
430 profundo: alto
profitetur: praedicat, divulgat
proles: filius, progenies
P. 226. prolapsus est: ruit
proelium: pugna
435 prolemsis: preoccupatio cum antea fit quod post te debuit
promis:
promisit: foras produxit
promulgatum: pupligatum
progatia: temeritas, audatia
440 procul dubium: sine dubium
procrastinat: differit
prodicus: nimis largus, devorat
prodigiosus: astrologus
profusus: largus
445 proficiscitur: vadit
P. 227. profanus: qui sacrum polluit alienisano
profugus: longe fugatus, exul
profectus: egressus
proflixit: prostravit
450 profluit: multum fluit
prolixa: longa promunt, proferunt
proletarius: milis capite census, milis inutilis bello relictus
promit: ostendit, loquitur
promulgare: foras praeferre, restatuere
455 promeritus: bene meritus
promunturium: eminens mons in mare
promsit: locutus est
pronuba: para nympha
P. 228. pronus: incurvus, humilis
460 pronepus: filius nepotis
propheta: prędicatur
propius: propinquuus
propendens: eminens
pro matertera: soror aviae
465 pronus: inclinus
properum: proximum
propulat: valde puplice
prona: inclina
propono ordino
470 pro nefari: plusquam inlicitum
propago: linia, origo, extensio
propatruus: frater pravię
prore: prout res exegit
P. 229. properat: fistinat
475 propensius:
prorigitur: ante erigitur
prosapia: origo, generatio
propere: prope, celeriter
prostituta: meretrix
480 prosa: prior pars navis
prorsus: specialiter, certe
prospecians: prospiciens
prosiquitur: verbis profitetur
propitiatio: misericordia
P. 230 left vacant
485 P. 231. proscriptio: bonorum admissio
proritat: ad ira provocat
protinus: mox, continuo, statim
protilat: prolongat
prosa: verba sine metro
490 proveor: transporto
prostituun: proponunt
pronas: carbones vivi
prosilitus: adiunctitius de aliena gente
prosperitas: filicitas
495 prosperare: recte agere
prospice: in ante aspice
proto plaustum: primum plasmatum

protervus : supervus, inrevocabilis, vitiosus
P. 232. provexit : in maius levavit
500 prudens : providens
promtuaria : cellaria
puniatur : uccitatur
puplites : genua suffraginis
pubat : crescit, incrementa
505 puberes : adulti iuvenis
pubetenus : usque ad inguina
pubertas : aduliscentia
pubescentes : gene barbamittentes
pube : virilia, verenda
510 pubiscit : barbis et testes
pudicus : castus
pudor : verecundia
P. 233. pugillare : tabulam
pugillum : pugno
515 pulvinar : locus ubi stat vastant
pululat : germinat, oritor
puerperium : cum puer inascitur
puerpera : mulier quae primo parto puero parit
pullum : nigrum
520 pugiles : certatores
pugio : gladius parvus
pudicitia : castitas, integritas
pugna : certamen
pulvinaria : arę mortuorum
525 puerperum : primo genito
putamen : testa de ovo

Q.

P. 234. quatio : concutio
quatinus : qua ratione et qualiter
quandam : aliquam
quassatum : confrat ? ?
5 quandoquidem : tunc omnino
quantocius : quam citius, celerius
quantolum : modicum
quadrifium : quadrifarię fissum
quamquam : quamvis
10 quęso : rogo
quaestuarii : mercennarii
quaerella : culpę accusatio
quaerito : sepius rogo
quaestum : lucrum, aquesitio
15 questio : disceptatio difficilis, explicatio, examinatio
P. 235. quaestus est : accusavit
quaestor : iudex ad requirendo
quęrolus : frequenter querellas ferens et acusatur
queverint : poterint
20 questuaria : qui quaestucocorpiris vivit
quemquam : aliquem
quemcumque : quempia
quemadmodum : quomodo, sicut
queo : valeo, posso
25 quendam : aliquem, quempiam
quempia : quemcumque
queror : iniurias meas iudico
quęstor : consiliarius et qui pecunia puplica prerogant
queun : possunt
30 P. 236. quibi : potui consensi
quidnam : aliquid et quid
quidve : vel quid
quin immo : magis aetiam vel potius
quispiam : aliquis
35 qui sciam : unde sciam
quiete : silentium
quiquantus : quam magnus
quin aetiam : si aetiam magis aemagis
quid stuit : quid cogitat
40 quinam : qui vero
quidni : hoc magis et quare non
quiddam : modicum aliquid
quinni : etiam, adverbium fermandi
quiverunt : potuerunt
45 P. 237. quisquilias : paleas minutissimas
quippe : re vera, sine dubium
quippiam : aliquid modicum
quisitor : iudex
quirites : populus Romanus
50 quies : pax, silentium
Quirinus : Romulus
quousque : quamdiu
quondam : olim
quopiam : alicubi
55 quo numine : qua potestatem
quorsum : in qua parte
quodpiam : quoddam
quonam : aliquo
quoque : dinuo
60 quominus : aliter
quorundam : aliquorum
P. 238. quocirca : quapropter
quodam : quocumque
quoquam : ubicumque
65 quorsus : qua ratione qo modo

R.

ratum : certum, firmum, validum
ratus : arbitratus
rates : naves
ramnum : genus herbe spinose
5 racemum : butrionem, uvam
rapacem : violentum
raptim : cursim, subito
randum : arbitrandum
raptati : tracti, separati
10 rapidus : velox
rabies : furor, insania
P. 239. rabula : rabidam
Rama : excelsa
rancor : in via dolor
15 Raphahel : nuntius dei

Rabbi : magister synĕ
radiatus : inluminatus
ramen : pulvis qui raditur de aliqua spętię
randus : velox, celex
20 radicitus : funditus
Ramensis : tribus a Romolo constituta
Racha : inanis, vacuus, vanus
rastri : ligones
rava : rauca vel clausa
25 rabitere : redire
radiat : splendit
P. 240. redemitus : coronatus, ornatus
reticuit : tacuit
ridimicula : retinacula
30 redivivum : avetustate renovatus
redarguit : convincit et de re arguit
redibet : inpensa sibi gratia rediet
redigitur : revocatur
redactus : perductus
35 redolet : bene olet
redibutionem : retributione
reductum : retroductum
rediviva : renascentia
redamat : amantes et mutuo diligentes
40 reduvias : reliquias
reducus : salvus, incolumis, reversus
P. 241. redintegrat : integrum restituit
recludit : aperiter, recludit
recensat : recitat, recognuscit
45 recubat : adcumbet
reciprocat : reconsiderat, vel reddit vicem
reica : metri genus
refello : recuso, redarguo, dissolvo
refertum : repletoum
50 refectus : plenus
referrerunt : repleverunt
refoculat : recreat
religio : sanctitas
refricat : renovat
55 refulget : resplendit
refutat : repudiat, respuit
refragatur : adversatur
P. 242. *refello : convinco*
referciunt : inplent
60 refuga : apostata
refert : revocat, reddit
regificum : regale
regimen : guvernatione
religiositas : sanctimonia, pietas
65 relatum : reportatum
relativum : dum unus nominatur, alius demonstratur
regerit : reportat
regessit : evomuit
regius : regalis
70 reminiscor : recordor
remur : arbitramur
remeat : regreditur
P. 243. remilus : repando
remugit : clamat
75 remotiora : secretiora
remulcunt : cum scava nave dicunt
renitet : res splendit
remes : remigatur
reor : arbitror
80 remittentibus : resistentibus
renidit : redolet
rebare : arbitrare
rebellio : qui per pacem integrat bellum
rebamini : arbitramini
85 reboat : resonat
rere : arbitrare, suspicare
repatriat : reddit ad sua
P. 244. reppedat : redit, remeat
repentinus : subitaneus
90 repente : subito
repacula : receptiacula
reppeit : invenit
repunt : serpunt
repens : natans, subtraens se
95 reserat : aperit
resides : odiosi
repedat : revertitur
respuo : contempno, refuto
resignat : re: signat, aperit
100 reses : odiosus
respectant : recogitant
resipisco : in integro spiritum redeo
P. 245. resiscere: cognuscere
respectat : respicet
105 resibunt : reluctant
resipiscens : recolens
respexit : deorsum vel retro vidi
resultant : resiliunt
restantia : residua
110 resurrectio : restitutio
resultatio : reluctatio
restagnat : redundat, abundat
residis : requies, odiosa
resuit : dissit condisire
115 reticuit : tacuit
reticiscit : ad intellectum redit
P. 246. *redarguet : convincit*
retentant : retinet
reticulata : cancellata
120 retubans : iacens
retexit : resolvit, replecat
retrudit : recludit
retundit : repercudit
retribuit : reddedit
125 reuma : revolutio gurgitis
revehit : reportat
reverens : honorificus
revelat : aperit, demonstrat
revinxit : postergum ligavit
130 revisam : reppedam
revocat : reducit
P. 247. reus : a re dicitur quasi qui rem tenet vel culpabilis

reviso : repeto, recognusco
revulsit : retraxit, eradicavit
135 revicta : reportata
rictus : patefacti oris
rigor : duritia inflexibilis
rigibant : rigidi durique erant
rinae : iuncture
140 ringitur : irascitur, indignatur
rimas : fissura
rimare : inquirere, scrutare
rivales : qui unam diligunt meretricem tamquam adunum rivum corentem
P. 248. ridicularius : risorius
145 rigidus : fortis, inmobilis
rigit : frigit
rigare : dirigire
rimis : iunturi stabularum
ritus : cultus et consuetudo
150 rite : recte, consuete
rinoceron : animal est in Nilo flumine cornu in nasu habens
robor : virtus, fortitudo
roborat : confirmat
robus : lignum spinosum
155 robustus : firmus, fortis
rogitat : sepius rogat
rovigo : gelum origo
P. 249. rogum : pirum
rogis : flammis
160 rogitans : postulans
Roma : virtus
Romani : sublimis
Romolite : Romani
rostrum : pecurum est et os hominum
165 rostra : pectora navium
rosca : pulcra
roscidum : humidum
ronannis : milis qui primo in bello pugna comitit
rubro : rubeo flabum
170 rubore : confusione
rufus : rubeus
ruvigo : gelum vel rugo messium
P. 250. rudia : nova
rudem : novum
175 rudentes : funes velorum in nave
rudimenta : initia, infantia
rudera : stercora
ruma : mamma al pugna
ruminat : diligenter recog'tat
180 rupea : saxosa
ruditus : asini clamor
rumigerolus : potitor omoris
rumphea : gladius
rumusculus : rumor brevis
185 rupes : saxa ingentia
rupra : ex utraque parte cav^a^to
rutilum : splenditum, crispum
P. 251. rursus : iterum, dinuo
rurigna : ruri nato
190 rus : pacus, ager durus
rusticus : rus colens
rustu : vi et fama
rura : agri, ville *inculti*
ruralem : terrenum
195 rues : ruina
rues : ruina
ruscus : spina longa iuncus habentes
rutilat : fulgit roseo colore
Rutili : gens q̃ sub Turno pugnarunt
200 *rura : agri inculti*

S.

Sacer : sanctus
P. 252. sacramenta : mysteria
sacra famis : execranda cupitidas
sacrilegus : sacrorum violator
5 sabiat : basiat
salamandra : hanimal quoddam in ignibus vivens
salebrosus : asper
salebra : loca lotosa
salpinta : tubicinatur
10 sacra : consecrata, divina
sacax : velox scitus an invistigandum
saccella : loca sacra
sabiatur : osculatur
saburra : arena id est onus quod vacuas nabes stabelliuntur
15 P. 253. sales : orbanitas
salum : mare
(*rasura*) : sanus
saltim : videlicit, nunc
salebra : loca coltuosa
20 saltus : locus incoltus, silvester
salvete : salvi estote
Salentinus : Calabriensis
sambucistra : qui in cythara rustica canit
sambucus : saltatur
25 sambuce : genus symphoniarum in musicis
sancit : purificat
saniem : corruptionem sanguinis
P. 254. sanctum : divinum, coltum, consecratum
sanxit : definivit, deiudicavit
30 sane : certe
sandaraca : auri pigmentus mundus
sandapila : ubi portantur gladiatoris
sabbatum : requies
sapabapipa : quasi dulco acitum vino
35 sarga : non idoneus cuius libeartis
sarissa : genus teli Macidonici
sarabara : linon, Persa braca
sarctum : coniuntum
sat : sufficit
40 sat agit : festinat
sata : seminata
satius : melius
P. 255. Satan : adversarius, transgressor

satrapae : perfecti Persarum
45 saures : surices
satellitium : satellita turma
Saturnia : Italia a rege Saturno dicta
satest : satis est
sator : seminatur
50 satum : modium semis
satellites : sotii latronum et regni comites
sautius : vulneratus
satillis : minester scelerum
satio : messis
55 Saducei : iusteficati
Sabaoth : exercituum sive vertutum
P. 256. Saulus : temptatio vel scuritas
Samarite : custodes
scandit : aperit, ascendit
60 scadit : bullit
scatens : bulliens
scaturrit : ebullit
scabrum : asperum
scabum : summitas, cacumen
65 squalet : sordet
scabrosus : asper
scatebrę : cesternę, paludes vel aquarum bullitiones
Scariothes : memoria domini et memoria mortis hoc numine appellatum est iuda vico in quo natus est
P. 257. Scaurus : cuius calex extrensicus eminet pede intortos
70 squalor : inquinatio
sicominus : sin autem, quo si non
spatiatur : deambulat
scafa : navicula modica
stater : nummus est pensa untia·l·
75 strages : mu'titudo kadaverum in bello vel mo lesi congeries
statim : mox, confestim
strangulat : susfugat
stadium : passus CXXV
stragula : varia
80 stadiodromus : stadiorum cursus
P. 258. status : statura
statuet : censit
stagnum : lacum
secta : institutio
85 secernet : separat
secunda : prospera, propitia
seclusam : separata
secordis : stultus, fatuus
secubo : secedo
90 secretus : separatus, occultus
sedulus : freques, asiduus
sectamur : sequimur, immitamur
secus : aliter et prope
secus quam : quam aliter
95 P. 259. sectans : exercens
sector : usurpatur
secelet : untiae pondus est
sedulus : freques, asiduus
sedicio : disceptatio
100 segmenta : quod e sectura serrę cadent
sedolitas : asiduitas
sedat : mitigat
secrinat : secretum facit
semicinctum : quod dimidium cingat
105 semivero : effeminato
senta : sordida
sentetia : firma et indubitata
sepsit : circumdedit
P. 260. serrę : unde ianuę muniuntur
110 sexus : natura
semenstria : liber in quo actiones sex mensuum continetur
scelestus : sceleris adinventus
sceleratus : qui sceleris pena patitur
scevus : sinester
115 scema : imago
sceva : prava, sinestra
scevitas : pravitas
scerpus : iuncus unde calamauci fiunt
sceptrum : virga regalis
120 scena : ludus mimicus in theatro
scemata : arena ubi athlete luctantur
P. 261. scenophygia : templi fabricatio et cum tabernacula figitur mense septembro
serta : corona ex floribus
serenus : clarus, laetus
125 serit : seminat, dicit
seria : molestia gravis
sero : darde
seu : sive
serva : ancilla
130 semivivus : medius vivus
seruit : seminavit, dixit
severitas : integritas iudicu
severus : modestus, distrectus
sevenites : lapi praecisus cuius candor cum luna adqui minuere cernitur
135 P. 262. septimontium : dies certus urbis Romę qua super septemontes sedet
semisitium : semigladium vel dimidę spatę
semoti : separati
seorsum : divisum, separatum
senium : senectute
140 sensim : paulatim, modice
sentes : spinae
sententiosus : integre iudicans
seponit : sequestrat
series : ordo, tenor
145 sequester : suspectur pignoris
serpit : invalescit, crescit
seminarium : semen
sertor : cultor
P. 263. semiermis : medius armatus
150 serpit : natat, penetrat
segnis : hebes, negligens

sevet : furet
sevitia : iracundia
seviter : crudeliter
155 severitas : integritas iudicii, districtio et rigor animi
serius : tardius
semicem : prope mortuum
serra : eo quod secatur
sescupula : et summa capitis et dimidia summę
160 semiustum : medium ustum
specimen : figura, similitudo
speculatur : inspector
speciales : singularis, spetiales
P. 264. speluncis : concavis saxis
165 spera : pila ingens
speltum : telum, missele
specularia : loca alta unde adtenditur
specu : spelunca
spretus ; contemptus
170 Spertheus : fluvius Thesaliae [*Spechius* in margine]
specialiter : evidenter, omnino
strenuus : efficax, fortis
stelionatus : dicitur quando una res duobus vinditur
strepito : tumulto
175 stemata : ornamenta regalia vel nubilitas
Stephanus : norma vestra
stephanus : coronatus
sibola : collectio numerorum
P. 265. sicili : sudorum
180 sica : genus gladii parvi
sidus : stella augurialis vel proprie tempestas
sicophanta : inpostorem
sicine : taliter
Sicania : Sicilia a SI
185 sicarius : gladiatur C A
siccum : serenum N
Sicaonium : Siciliensi O R
sidera : stillae E
sidonia : clamide syriae G E
190 signifer : qui signum portat in bello
sicera : omnes con*f* ligoris convinum imitantur et enibriat sed proprie est ligor ad bivendum suavem qui ex dactalis expremitur
P. 266. signa : indicia
signities : ḑardi*tas*, pigritię
signanter : evidenter
195 sigilla : minora signa
signes : ḑardus, piger
signius : tardius, negligentius
signitia : pegritia
silurus : genus picis
200 silogismus : collectio sermonum
siliqua : follicolus liguminis
silet : tacet
silentes : tacentes
silenter : tacite, latenter
205 syllaba : conprehensio litterarum vel vocabula
P. 267. silanus : tubus
simolat : fingit
simulacrum : efigies, imago
simultates : rixę content'ones
210 simulata : fincta
simultas : dolus, lis occulta
simulatur : qui aliud loquitur, aliud cogitat
sin : si non, sic
sinodus : congregatium senum
215 sinonima : pluri numina quę multis vocabulis unam rem significat
singultum : subglutium
P. 268. symbulum : obtima conlatio vel pactum quod cum deo fit
sin : portus
sinphitō : s̃pu caloris vitę. grēc
220 sine : dimette
sinagoga : conventus
singulatim : per singulas vices
singraphum : cautiosus scriptio
sinistrum : contrarium
225 sinaxin : solempnia
sinciput : dimidium caput
Sirtes : vada saxosa
siromace : gladium
P. 269. Sirio : stella estuales
230 sistrum : insigne sacerdotum
sistit : statuit
situs : positio, ordinatio
sion : specula
siticolosus : qui semper sitit
235 Simon : pene merore vel obediens
scivit : sententia dedit
scribula : epistula
scilicet : re vera, sine dubio
scisma : divisio, separatio
240 Scille : saxa latentia in mare
sciniphes : culicum genus aculeis permulestum
P. 270. scitum : populi decretum
scidit : dividit
scinis : tabernacula
245 sciscitatur : interrogat
scriba : legis peritus
spiris : nodis quibus elegant serpentes
spicularius : lanciarius
spicula : iacula
250 spicolum : caput sagittę
spirabile : per quod spiratur
spiravere : oluerant
stigma : poena
stigia : infernalia
255 P. 271. stigmata : poena
stiga : tunica
stilus : de quo scribitur elogium tractoris
stridor : sonus asper
stimma stimata : genealogia

260 stipante : spissante
stipolatores : iudicatores
stipulatus : testeficatus
stipatus : multitudinē circumdatus
stipendia : munera censum
265 stirps : propaco, prosapia
stipem : quod de parvo in summa colliget sive mendicans
P. 272. stiria : stillicidia celata
stivio : tinctura
Stix : palus aput inferos
270 stino : de isto loco
stimolus : compunctio, instigatio
stimulat : incitat, admovet
stipat : congerit, conponit
stipante caterva : conpremente multitudine
275 stipis : truncus
stipendium : fructum laboris, anonam
stimulatio : promissio
stiba : manubrium aratri
stricto pungione : evaginato glatio
280 P. 273. stirania : non longe
socors : stultus, negligens
socer : patris uxoris
socrus : mater uxoris
socordia : stultitia
285 subrinus : patrui magnus filius
Socrates : primus fylosophorum
sollers : astutus, vigilans
sollicitat : suadit
solatur : consulatur
290 solidat : firmat
solidudo : heremus
solemnitas : religiosa sollicitudo
P. 274. sol ruit : sol occidit
solium : sella regia
295 solitus : consuetus
sollertia : astudia
sospis : salvus
solamen : solatium
solum : terra, pavimentum
300 solido : forti
sordere : vilescere
solensa : sacrificia annua et festa solida
sontes : nocentes
solocysmus : flexuosa et tortuosa conclusio
305 sons : nocens
sonipes : equus pedibus sonans
sonoras : voces graviter sonantes
P. 275. sopitus : extinctus et somno gravatus
sopire : conpescere
310 sopit : quiescere facit, finit
sconna : sponsa
scortum : meretrix
sodalitas : amicidia
sodales : socii latronum et amici
315 spondit : promittit
sponte : voluntate, ultro
spolia : quę occiso hoste tollitur
sponsor : promissor
sporca : ignominiosa, inmunda
320 stolidus : stultus
P. 276. storiographus : storię conscriptur
stolediosus : odiosus
stropha : praeversio fraos inpost
Stoici : philosophi severissimi
325 stronopharius : inpostor
stola : genus vestimenti candida
sublimis : altus
subnixa : subiecta, supposita
subrigens : erigens
330 subpromit : abscondit, occultat
subnixi : circumdati
subtrectatur : substituitur
subiecit : humiliavit
P. 277. suboles : progenies, filii
335 subulcus : pastor porcorum
subsannat : inridet
substituit : in loco decedentis constituit
sub sudo : sub caelo
sub pectore : in animo
340 sublatum : raptum
subsedet : sucedendo possedit vel paulolum sedit
sublimior : altior
subrigit : subsistit
subparent : supplent, parent
345 substetit : paulolum stetit
subtexsunt : opponunt
P. 278. subnixius : humilius
sub visibus : prae oculis
subegit : subdedit, devicet
350 subsidia : auxilia
subsicibus : subsequentibus
subnectens : subligans
subtemine : trama
subicet : suppone
355 sublimatus : honore exaltatus
subnixus : auxilio instructus
subeo : ascendo
subfascinatum : succinctum, harmatum
subcenturatus : adiunctus
360 subtexere : obscuravere sublustru
P. 279. sublimitas : altitudo, excellentia
subantes : lividinantes
subdicione : sub potestate
subsicius : malus vel praesubdolus
365 subrepsit : intercepit
subripuit : fraudolenter tolit
substantia : facultas, natura
subvectat : supportat
submissi : supplices
370 subequilibra : sub iusta mensura
sublapsa : diminuta
subtrecta : inclinata
subrige caput : humiliate
sublegit : subtrahit, collegit

375 P. 280. subsistentia : uniuscuiusque persona
subrogatus : substitus, sortitus
succedit : intravit
sucerda : stercus uvile
sudum : serenum caelum
380 suellas : porcinas
suetus : consuetus
suere : consuete cosire
scrutus : lucis duritia
scrutat : discutit, inquirit
385 scurrilitas : garrolitas
scrupea : saxa aspera
scupulum : saxum prominens
scrupulatur : sollicitatur
P. 281. sudes : tetiones, pali
390 sues : porci
suescit : consuescit
suffusio : vulnerato
suffultus : munitus
sufstagium : auxilium, patrocinium
395 suffragatur : auxiliatur
suffraginatus : percisus cruribus
suffectus : substitutus cum decedentes
suffecet : subminestrat
scrupolo : dubitatione
400 scrutenium : examinatio
scrursula : puplicus inpostor
scurra : vaniloquax
P. 282. scrupulosa : suspecta
sugilat : suffucat
405 sugerit : subministrat
sugillare : strangullare
sutor : cultor
sumo tenus : usque summo
summum : postremum, novissimum
410 suppremum : ultimum
superstitiosus : falsus, religiosus
superus : summus
supercilium : typum supervię
supplet : conplet
415 superaria : vestis quae superinduitur
P. 283. superbus : contumax
sumptuarius : qui erogat sumptus suum opere
supellectile : res mobilis
superstitio : superflua institutio
420 supervacuus : non necessarius
suprestis : supervivens filius
supplex : submissus, rogans
suppremi : occultarium extremi
suppet : suppetita, subministra
425 supplosa : exclusa
suppeo : rogo in animo
spurius : meretricius
spurus : qui ex matrem nubilem et patre infimum nascit
P. 284. spurticia : inmundicia
430 summa : quantitas pecunie
summatim : paulatim
suavum : oscolum luxuriosum
sura : posterior pars tibie
susurrat : murmurat
435 sustentant : nutriunt
sustulit : segregavit, rursu tolit
suscepit : veneratur
suspicienter : venerabiliter
suspice : surso aspice
440 sus : porcus
suscenset : irascitur, detrahit, increpat vel culpat
P. 285. suspis : sanus, incolomis
su*pensi : dubitantes
susurrio : sententiosus, bilinguis
445 suspiciendo : surso aspiciendo
suspectant : aspiciunt
sustentant : nutrit
sutor : calicarius
sunto : sint
450 sutores : pelliû sarsores
stupeant : mirentur
stuprum : fornicatio
studio : disciplina
struet : congestio lignorum
455 struices : constructi conpagicati
P. 286. Syrtes : loca arenosa in mari
suovetaurealia : sacra sunt de trebus animalibus de sue ove tauro

T.

tabitudo : putrido
tabentes : languentes
tagax : foruncolus
talionum : retributionum
5 talami : cubiculi
taria : calciamenta
taxat : tangit, nominat
taxator : aestimator
tantisper : interim
10 tantotius : tanto velociu
talentu : centum pondus auri idest pondus lxii *id est* xxii
P. 287. tantane : tanta ergo
tabo : sanguine corrupto
tabe : morbum
15 tacmata : curia seu chorus
talio : eiusdem pene ratio vel vicissitudo
taura : sterelis
talatrus : colaphus
tautologia : repetitio sermonis bis vel ter
20 Tartharum : infernum
taxatio : nominatio
tantundem : aliquando, demum
trabica : carina tuba
transtres : tabulę in nave ubi rimiges sedent
25 P. 288. tramite : via, semita transversa
trapete : molę olivarum
tragula : teligenus quo mittitur

trasena : teculaperta qua lumen venit
trancillus : placitus
30 trabes : vestis senatorea porporea
trages : sagitiarii primi
tragum : genus frumenti
tracopis : ut supra frum
teges : coopertorium
35 tedet : penitet et tetiupatitur
tegmen : velamen
telum : sagitta
P. 289. tellus : terra
telluerunt : genuerunt
40 tegetes : cooperturia
tedae : faces nuptiales
telonium : quasi omnium litorum fiscalis ductor
tela : arma
tellitus : festivitas
45 tempestivum : oportunum
temere : audaciter
temulentus : vinolentus
temetum : vinum
temerarius : praesumptor
50 P. 290. Tempe : silvae
tempsit : contempsit
tenus : usque
tensa : genus veicoli
tentoria : papilionis
55 tenax : avarus, perseverans
tenuis : gracilis
tenor : mensura, ordo
tenacitas : continentia
theoria : consideratio
60 thesicure : mura quinta
thesaurum : pecunię depositum
theusebia : sapientia
P. 291. Theophilum : quem deus diligit
temerator : litigatur, violator
65 terribilis : metuendus
teretri : trunci, rudundi
terretus : turbatus
tergeminam : triplicem
terret : pisat terendo pede
70 tergiversare : fugire et dicta mutare
terrigine : gigantes
tergus : tergora, pelles et coria
terminalia : dies festi pertinentes ad terminum quem deum potaverunt Romani
P. 292. terminus : finis
75 terrivola : formidolosus
terebrat : pertundit, forat
terretigima : rotunda gemma
terrificus : terrorem faciens
terret : confundit, terrorem incudit
80 teredo : vermis in ligno
terestrum : mavurtium quod mulieres Arabiae utuntur
trepudiat : gaudium exultat
tresoli : triduum
tremulum : crispum
85 trenis : temptatio
P. 293. testamentum : pactum
testa : vasa fictilia et caput
tesqua : deserta, aspera
testator : testibus praesentibus loquitur
90 testinum : oportunum
testudo : densitas ramorum et coniunctio scutorum
tessarius : qui bellum nuntiat
tesus : odiosus
tetrum : obscurum
95 Teutoni : Cymbri, Galli
textrinum : locus ubi nabis fabricantur
P. 294. tetrarches : quarta partem regni tenentes
tetricus : obscurus
tetitini . . genui . . . abui
100 Teucri : Troiani
Tyarus : chorus liberi patris
thisum : sacra
thyara : galea persica et pilleum frigiorum
Thytis : mare
105 thiasis : laudes virginum
tybia : symphonia
typus : similitudo, figura
typice : figuraliter
tyro : ignarus, novus
110 P. 295. Tybris : tiberis a tubro rege
Tybon : insula minor ubi omnium generum arboru folia numqua deficiunt
tybicines : abies continens, vel qui tybia canunt
tyrocinia : initia, rudimenta
typhe : stulta superbia id est secta
115 Tyrii : Cartaginenses et ipsi qui Tyro habitant
Titan : sol
Tinia : luna
Titantes : principis
P. 296. titulus : nota, indicium
120 Tisifon : nomen furie
titubat : dubitat, vacillat
titulat : signat
tritavus : proavus
triarcus : navigans
125 tribuli : genus spinarum
triumphum : victoria
trinepus : pro nepus nepotis generatio
triumphatum : devicto
tripodis : mensae cum III pedes
130 Trinacria : Sicilia insula dicta eo quod III acra abeat de promunturia picinnum, pelon, lilybeum
P. 297. *trieres magna : de qua in Esaia nō transivit per eam*
trieres : navis magna quas Greci dulcones vocant
tribus : populi divisio
Trivia : Diana et Luna
135 Trinami : Siculi

Triton: homo marinus, medius pescis
Tritonia: Minerva
Trinacria pubes: Siculi iuvenes
Triarum: partitores signorum
140 tripertiti: tribus erogat
trifauci: qui trea capita habet
triboles: curiales
triari: tervo loco in exercito
trifarium: tripertitum
145 trifaria: est tribus partibus divisum
P. 298. thomen: sectionem id est que dividi potest
tholum: signum rodundum q̄ super culmen domus ponitur
thronus: sedis
tholum: fastidium templi rotundi
150 thorvus: intento vehementi vultu
thoracium: ornatus mimicus
thomus: divisio
tholes: membra sunt circa uva
tomix: vestes leviter torta
155 torris: fusus
torrens: flubius et pluvia
torpescit: frigiscit, stopiscit
P. 299. toga praetexta: quae in senato induitur
torrent: siccant, tostant
160 torpet: stopet, languint
torpor: stupor animi vel corporis
torus: lectus corporis
toreomata: vasa tornatilia
todidem: tanti
165 torale: pectorale
tollet: exaltat
tostum: tumulum et quoadunatio terre aut lapidum
torax: lurica
tori: lacertibus bachiorum
170 toregma: tornatura
torita: velox et sicca
P. 300. torace: pectus
turpdus: stopidus
tollit: delet, extinguit
175 trophea: signum victorie
tropologia: morales et intellegentia
Troas: Troiani
trossoli: aequides Romani cum equis puplicis
trocus: rota ludentium
180 tropus: mensura dictionis et sonus
tropice: moraliter
tuba: bucinum
tublia: media vel rega
tuetur: custodit
185 tuitio: defensaculum
P. 301. tutela: procuratio, defensio
tum: tunc demum um postea
turabulum: tymia materium
turma: certus numerus hominum
190 turbitus: iratus, perturbatus
tuitur: intuitur
turbine: tempesta nigra ventorum
turificatus: purgatus
tucellaria: maleficia quae super tegula faciuñ
195 tunditur: ververatur
tumulus: sepulcri dicuntur prop.. rte raeco ngeriem
tubicines: qui tuba canunt
tubera: genus cibi quasi fungi qui sub terra inveniuntur
P. 302. tuta: secura, munita
200 tuitus: misertus
tugurium: ospicium modico teia
turbo: vertigo et impetus venti
tumidus: superbus, iratus
turgit: tomit, inflatur
205 turbulentus: obscurus
trutina: sixtera
truculentus: ferox, inimicus
truges: gentilis, asper
trutinat: perpensat, perpendit
210 trux: crudelis
trucidat: interficit
truncus: sine capite
P. 303. trudit: inpingit, recludit
truditur: in costudia inpellitur

U, V.

vadet: concudit
vexat: movit
vabulum: favae corium
vacillat: titubat
5 vademonia: iudicia e fideiussionis vel sponsionis
vadatur: litigat
vadite: ambulate
vada: terra et mari
vades: fide iussoris
10 vada dura: saxa dura
vaprum: varium
P. 304. vagitus: ploratus
vagetatur: videnter plangit
vaius: qui genibus iunctis ambulat
15 vallata: circumdata
valetuderius: qui frequenter egrotat
valvas: ianuas, fenestras
vallas: palus acutus
vallum: fossatum circa murum
20 valens: potens, vigens
valdus: firmus
validant: sani sunt
vacurrit: per otio vacatur
varice: vitia q̄dā pedu stando nascuntur
25 vates: divini et prophete
P. 305. vastat, praedat
vastitas: magnitudo, amplitudo
vafer: callidus, asper
vafre: inaequaliter
30 vatus: tortis pedibus
vastat: magna, grandia

vascaudes: congas ereas
vecors: minus habens cordis
veranus: minus sanus
35 vecordia: stultitia
vectitat: frequenter portat
vectigalia: a vehendo mercibus dicta omnium quae negutiatorum solutionis
velificat: navigat
P. 306. vellunt: eradicant
40 vellera: vestes ovium linosę
veiculum: iumentum, carrum vel omnem quod a portandum utilem est
vehit: portat
venustus: pulcher
veneunt: vendunt
45 vectus: portatus
vectigal: tributum de capite
velant: tegunt
veluti: quasi
vellum: populum
50 vegetus: incolomis, sanus
vehementer: velociter
P. 307. venum: vinditio
veneo: vendor
veneficia: maleficia
55 venustri: campani
veneratur: honorat
veniet: vendedit
venificus: venen^{a}rius hervarius
venditatibus: venale offerentibus
60 venenatus: qui venenum accepit
versat: cogitat, mutat
versutus: astutus, controversiosus
vernat: floret
vernaculus: servus in domo natus
65 versatile: tornatile, voluvile
P. 308. vertigo: aquae revolutio
verrunt: supertrahunt, aufert vel scopant
verbenę: frondes
verberat: cedit, flagellat
70 vereor: timeo
verrunt: vestiunt
vergit: declinat
vernacula: ancella domestica
veretrum: pertusorium
75 verisimile: veritati simile
verpus: circumcisus
veridicus: veri dicens
versibilis: callide artificiosus
vertix: summitas capitis et cacumen montis
80 P. 309. veternum: antiquum, vetustum
veterator: inpostor
vernum: prima vir
vervotinus: sicut dicut
ubertas: habundantia
85 ubertim: abundanter
vesperago: stilla
uberes: pinguis
vescetur: manducat
vestibolum: ingressum et prima pars domi
90 vexillum: signum militare
viaca: vehimentla
vibrare: asta intorquere, militare
vibrat: fulgit, crispat, diriget
victimo: immolo
95 victima: ostia
P. 310. vicissim: alternatim, mutuo
vicissitur: conpensatur
victus: superatus
videlicet: sine dubio et vidire licet
100 viduatus: orbatus, fraudatus
viget: vivit, valet
vigentes: virilibus pleni
vigil: vigelans
vilicus: villae custus
105 vipurna: silva minuta
vinxit: heavit
vinnubis: mollis
virentia: frondentia
vinceas: machimmentorum gene(ra) quae fiunt in modum torrium ad expugnandos muros
110 P. 311. virecta: loca quaevis sint in agris arboribus minutis frondentibus
virulentus: venenosus
viritim: sintillatim, paulatim, semigratati
virgo: a vigore aetatis dicet
virgulta: silva minuta
115 virus: odor ferarum
vis: usrtis
vis hanimi: sapientia
vis corporis: fortitudo
virere: visitare
120 vita: mores, natura
vituperat: accusat
vitulans: lascivus, gaudens, cum exultatione ledans
P. 312. vincla: vincula
vividus: fortis
125 vindix: ultor, iudex
virus: venenum
viriosus: austerus
virgo: fortes femina
virguncula: virgo modica
130 virtus: animi est
vires: corporis
virendo: vescendo, vivendo
viribus: obtatibus
viscera: loca membrorum vitalia
135 vitat: declinat
vitricus: secundus maritus
vitigilat: vituperat
P. 313. volumen: liber a volvendo dicet
voluntas: mens
140 vorat: sorbet
volvit: pectore cogitat

voluilitas : mentis veritas
voluptas : concupiscentia
volutabra : loca in quibus se porci vulutantur
145 volucres : veloces
vola : manus cava in medio unde involare dicimus
vorago : obsorsio et fosso profunda et terrę iatus
vormet : vos ipsos
vociferatur : clamat
150 vovit : promittit
vuetema : adiutoria
voti compos : memor expl̄i de v̄o
P. 314. uberius : abundantius
uberus : abundantia
155 ubertimi : abundanter
uberes : pinguis, fructuosus
uberrima : fructuosa
vulsum : vi abstracto
vulgo : pala, passim
160 vultuosus : qui semper vulto mutat
vulgus : vilis populus aut plebs ex
vulgata : in notitia data
vultus : contemplatio
ulli : aliqui
165 ulciscor : vindico
ultor, ultrix : vindix
P. 315. ultro : sponte
ultra : supra
ulcus : quod intus nascitur, vulnus
170 ulcera : vulnera
ulteriori : posterior, inferior
ultus : vindicatus
ultatus : damnatus
ullus : aliquis
175 ulciscimur : vindicamur
ululae : aves nocturnę
ulto cetroque : intus vel foras
ultrices : vindices
ultio : vindicta
180 uligo : humor terrę perpetuus
ulna : cubitus et extensio manus ad gremio
P. 316. ultimus : novissimus
ultosus : tristes
ulva : genus hervę, paludis
185 umbo : extrema pars
umbrosum : contectum
umbris : tenebris
umqua : aliquando
undantia : ebullentia
190 unco : curvo
unorum : multorum
unchus : anchora
uniginę : geminae
uncire : alligare
195 unice : prime, optime
P. 317. unguine : unctione adipem
undique : ex omni parte
unicuba : vidua qui uni cubit
unguis : cuius diminutio ū ē ungula
200 urbs : dicitur civitas ędificium, civitas autem populus est, non paries
uros : bos silvaticus
urvum : quod bovules tenet in aratro
ur : incendium
urna : unde ducunt sortes, quasi quarta
205 urit : accendit
usus : consuetudo
usto : incenso, ustolato
usquam : alicubi
P. 318. usura : faenus
210 ustrima : locus ubi conburuntur corpora
usitato : consuedudine
usquequaque : per omnia
uspiam : ullum locum
usurpat : inlicite utitur, praesumet
215 uterque : ambo, utri
utrisque : ambobus
utrubique : utrique parte
uti : frui
utensilia : usibus necessaria
220 utpote : ut aestimet
utique : manifeste, ideo
utrubi : ubicunque
utrum : potans
P. 319. uter : unus ex altero
225 utire : fruiri
ut reor : ut arbitror
utroque : et hoc et illud
utrius : et huius et illius

X.

Xenodocium : locum venirabilem in quo peregrini suscipī

Y.

uberbolice : elate
ymnum : laus
ydria : situla
ydrus : aquaticus
5 yades : stel*lae*
ypotica : huniversa substantia
pliada : sex *stillae insimul*
P. 320. ypinx : animal quasi ad similitudinem pardorum quas alii lamminas dicunt

Z.

Zernam : inpetigo
zelus : emolatio
zizania : lolium
zirotha : series
5 zima : olla
zipherus : ventus
EXPL. ERMENEUMATA
DŌ GRATIAS AMEN.

PRELIMINARY STATEMENT.

The glossary, which I have here printed, was copied by me at the suggestion of Dr. Loewe, who in a letter dated July 27, 1881, wrote me as follows: "Entschieden einer der ältesten Glossarcodices ist der Sangallensis 912. Wenn man den ganz und gar publicierte, so wäre schon viel gewonnen. Jede Glosse darin ist ja mindestens aus dem achten Jahrhundert, und unter diesem Gesichtpunkt gewinnen auch die trivialen Glossen ihren Werth. Ich habe nun aus dieser HS. sehr bedeutende Excerpte, ausserdem die vollständige Copie einer parallelen HS. und sonst sehr viel was in diese Sammlung einschlägt. Wie wäre es wenn Sie diese HS. aufs genauste copirten und wir sie dann zusammen edirten." Accordingly I made a careful copy of the manuscript in August, 1881, but other duties prevented my attempting immediately the proposed edition.

In the summer of 1883 I had planned to go to St. Gall to revise my copy, and afterwards to consult with Dr. Loewe about its publication; but this plan was sadly interrupted, and I had no further correspondence with Dr. Loewe on the subject up to the time of his sudden death. He is therefore in no way responsible for the present edition. When requested by the Association's Committee of Publication to print my paper, including the glossary, I consented to do so, provided I could secure previously an accurate collation of my copy with the original. To facilitate the work of collation, which Professor Adolf Kaegi of Zürich kindly offered to do for me, I had the glossary printed at once, which must account for the notes following the text, instead of occupying the more convenient position at the foot of the page.

Early in July, 1884, I wrote to Professor Goetz, my former teacher, telling him of my plans, and inquiring about the parallel glossary mentioned by Loewe. Unfortunately, he was absent at the time in Copenhagen, and his very kind letter, dated August 25, did not reach me until the Glossary was in type as far as the letter S. I quote a part of his letter. "Loewe besass noch keine Collation der ganzen Handschrift. Mittlerweile hatte ich den Codex in Jena, und habe ihn sehr sorgfältig abgeschrieben. Auch besitze ich die Abschriften von acht verwandten Glossaren. Ein Parallel-glossar ist jedoch nicht darunter; sie sind alle mehr oder weniger verwandt. Loewe scheint sich geirrt zu haben, eben weil er den Sangallensis noch nicht vor sich hatte ausser einigen Excerpten von Usener. Ich bin jetzt gerade mit diesen Glossaren beschäftigt, weil sie den ersten Band des Corpus Glossariorum bilden sollen." Had I known earlier that an editor so much more experienced, possessed of a critical apparatus so much more complete, was about to undertake the same task, I should hardly have ventured upon it.

I regret that I have not been able, for typographical reasons, to represent the abbreviations of the manuscript, especially the very common ones for final *us*, *m*, for *pro*, *per*, *prae*, *id est*, *vel*, and the like; but as I particularly requested Professor Kaegi, wherever he disagreed with my resolution of an abbreviation, to indicate it, I hope that not many mistakes have arisen in this way. In other respects I have striven to follow closely the orthography of the manuscript.

I have felt obliged to make my notes as brief as possible, and often, where I might have added much confirmatory evidence from other glossaries, I have contented myself with giving simply the correct reading. Often where the correct reading must suggest itself at once, as in the case of *aemolus* for *aemulus*, I have made no note whatever. I have thought it wise, too, in view of Professor Goetz's forthcoming edition, not to indulge too freely in conjectures, which might be completely overturned by actual manuscript readings. Where no note is found, therefore, on a puzzling gloss, it may be concluded that I have not solved the puzzle to my own satisfaction. With all its imperfections, I still hope that this edition will do something to stimulate the interest on this side of the Atlantic in the subject of Latin Glossaries, and will increase the appreciation of the difficult undertaking to which

Professor Goetz has addressed himself with so much vigor in the place of his departed and honored friend.

My sincere thanks are due to Professor Goetz, who has generously furnished me with some of his own readings on glosses where I was in doubt, to Professor Kaegi for his careful collation, and to Professor Robinson Ellis, who has very kindly sent me numerous parallel glosses taken from two glossaries in Oxford. One of these is in the Balliol Library (155) and is of the fourteenth or fifteenth century; and the other is in the Bodleian (Auct. T II 24), of the eighth or ninth century. He has also sent me a few from a glossary in the Phillips Library. These will be found indicated in the notes by Ball., Bod., Phill.

Glosses which have been added by a second hand are given in the text in italics. Aside from these, three hands can be distinguished in the manuscript. *a.* The greater part is written in half-uncial belonging to the seventh or eighth century. *b.* Pages 189, 190, 225, and 226 are written in a somewhat larger, and probably later, hand (uncial), not earlier than the eighth or ninth century. *c.* Page 201 is written in an entirely different hand, of the ninth or tenth century, resembling the Merovingian.

I have referred to the following works in the notes by the abbreviations herewith given:

Loewe Prodromus, Leipzig, 1876. (Prod.) Glossae Nominum, Leipzig, 1884. (Loewe G. N.)

De Vit's Glossarium. (De Vit.)

Hildebrand Glossarium Latinum, Goettingen, 1854. (Hild.)

Placidi Glossae. A. Deuerling, Leipzig, 1875. (Plac.)

Glossae quae Placido non adscribuntur nisi in libro glossarum, A. Deuerling, München, 1876. (Plac. L. G.)

Epinal Glossary, ed. Sweet, 1883. (Epin.)

Three Erfurt Glossaries published by Dr. F. Oehler in Jahn's Jahrbücher, 1847, pp. 257–297 and 325–387. (Amplon.)

Lateinisches Glossar des 9. Jahrhunderts aus cod. Mon. 6210, G. M. Thomas, München, 1868. (Mon. 6210.)

De Genere Neutro intereunte in Lingua Latina, E. Appel, Erlangen, 1883. (Appel.)

De Differentiarum Scriptoribus Latinis, J. W. Beck, Groningen, 1883. (Beck.)

Archiv für Lateinische Lexikographie und Grammatik. (Archiv.)

Addenda Lexicis Latinis, L. Quicherat, Paris, 1862. (Quicherat.)

Itala und Vulgata, H. Rönsch, Marburg, 1875. (Rönsch.)

Auctores Classici edidit Ang. Maius, Rome, of which volumes VI., VII., and VIII. contain glosses. (Mai. VI., VII., VIII.)

Of Du Cange I have been able to use the new edition as far as F.

Words printed in small capitals will be found in the Forcellini De Vit Lexicon or in Georges.

NOTES.

A.

2. Loewe, G. N. p. 4, gives from Amplon. *abavus: tertius pater;* but *tritavi pater* is more correct. Verg. Aen. X. 619 has *quartus pater*, explained by Servius as *abavus*. The spelling *ababus* occurs in inscriptions. — 3. lege involata. So Epin. 3, E 35; cf. Prod. 174; *abacta: involuta furata*, Bern. 178; *abigiata: involata*, Goetz, Archiv für Lat. Lex. I. p. 560. — 4. l. actu; cf. Plac. 1, 12, and Goetz, l. c. "Ich fasse *actus* als den bekannten juristischen Terminus (Übertrift)." — 5. Cf. Prod. 139, *abantes: mortui quos Graeci alibantes appellant.* "In margine manus rec. *alibantes* et aliudquid quod legi

nequit, adscripsit" (Goetz). — **6.** Cf. De Vit and Hild. A 1. — **9.** l. averruncat, *abstirpat* in sense of *exstirpat*. — **10.** Perhaps corruption of *averruncat;* see, however, De Vit and Hild. A 160. Epin. 5, C 9 has *avenicat: eradicat;* cf. Amplon. 271, 351, *avenat: eradicat*. — **11.** l. avillus; cf. Paul. 14, 7, *avillas agnus recentis partus*, and Prod. 349. — **13.** l. abigit: proicit; cf. Goetz, Archiv, I. 560. — **14.** l. tollit rem alienam. — **16.** l. abiugassere; cf. Plac. 9, 13, *abiugassere: abiungere, abducere*. — **18.** "*remota r* in rasura" (Goetz). — **22.** Cf. I. 232, *incruentes: inminentes*. — **23.** l. avida; Ball. *abita: desiderata cognita*. — **27.** l. aporria; cf. Cael. Aurel. 121, *corporis defluxiones quas Graeci* ἀποῤῥοίας *vocant;* Plac. 4, 5; Bod. *aborrea: manatio;* Epin. 2, A 9, *apporia defluens*. — **28.** l. abominat. — **33.** l. abhorret. — **35.** l. apluda; cf. Plac. 8, 13, *Apluda, furfuribus milii pannicique*, where G. has *ablundam*, and Paulus 10, 14. — **36.** l. ab usu; cf. De Vit. — **39.** Cf. De Vit and Hild. A 17. — **40.** l. abutitur. — **41.** l. amovit; cf. Tertull. adv. Marcion. 4, 15, Totum quod ab homine captatur, *abdixit* Creator. — **42.** l. non plurima consumere sed suspensis digitis leviter cibum tangere; cf. De Vit. — **45.** l. arrepticius. — **48.** l. abditum; cf. Prod. 148. — **50.** l. abgrego: separo, segrego. Kaegi reads *et egreco*, Goetz *segreco*. — **53.** l. renuit. — **54.** l. abnuo, *abniso* is Goetz's reading. I read *abviso;* so Ball. *abviso: veto, nolo*. — **55.** l. abnepos. Cf. Ball. *abnepos: filius nepotis, abnepos dicitur quia seiungitur a nepote, est enim inter illum et nepotem pronepos*. — **56.** l. humilis; Ball. *abrogans humilis dicitur, arrogans superbus*. — **60.** l. longe. — **61.** l. dubium. — **63.** l. abitote; cf. Loewe, G. N. 205. — **65.** l. aptra: folia vitis; cf. Prod. 143, and Titinius Ribbeck Frag. p. 159. — **66.** l. apricum. — **67.** Perhaps abest: longe est, or a corruption of **64.** — **68.** l. agape. — **69.** Cf. AGAPETAE. — **70.** l. Achates; cf. Plac. 3, 22. — **71.** l. acanthus; conficiuntur; cf. ACANTHION. — **72.** l. accentus . . . sonus . . . correptae. — **73.** l. acerbitas. — **74.** l. acervus. — **79.** accersitio. — **80.** l. Acheron: fluvius aput inferos. — **81.** l. hactenus. — **82.** l. acieris; flamines aut pontifices; cf. Prod. 257, and Paulus 10, 1. — **83.** l. acerra: arcula turea (turaria?); cf. Bod. *acerra arcatura;* Epin. 1, C 1, *accerra: arcaturis;* and glosses cited by De Vit. — **84.** l. acervat: condensat . . . coadunat. — **86.** l. ubi tractabat. — **87.** l. saevitia. — **88.** l. acediatur. — **91.** l. acedia. — **95.** l. accipitrem: acceptorem, ascribed to Placidus in Liber Glossarum; cf. Bod. *acceptorem: accipitrem*, and Lucilius, 1130 Lach. *exta acceptoris*. — **96.** Cf. Ball. *actius: amplius vel verius*. l. auctius: amplius, uberius. — **97.** l. aconitum. — **98.** = ἀκοινώνητος, which Jahn reads Juv. VII. 218. — **99.** l. acroteria; cf. Bod. *acrocheria ligamenta articulum;* Ball. *achrocheria ligatura articulorum*. — **100.** l. hic acinus et huius acini. Cf. *acini* dicuntur proiecti uvarum reliquie et ideo corripit penultimam quoniam non de nomine sed de verbo dirivatur hoc nomen *hic acinus, huius acini*. *Acinum* vero neutraliter dicitur aqua, qua lavantur uve post expressum vinum, *acinum* dictum quasi aquidum vocaturque vinum secundum et est potus servorum (Gloss. Phillipp.). — **101.** Perhaps acuum = aginam; cf. Paulus 10, 4, *Agina* est, quo inseritur scapus trutinae, id est, in quo *foramine* trutina se vertit; in that case l. diatrema (διάτρημα) = foramen (cf. Schol. Luciani, vol. 1, p. 579 and 597), — **102.** l. accola . . . alienam terram. — **103.** l. culmine. — **104.** l. actutum. — **108.** Cf. Isid. Or. VII. 1, 14, *Adonai* quod generaliter interpretatur *Dominus*. — **110.** l. consequitur. — **111.** The MS. has *adtest* with *t* deleted. — **113.** l. addita: adiuncta. — **117.** "adfirma et ligatura quam non intellego. an adfirmans?" (Goetz). — **122.** l. innodata, adiuncta; cf. Verg. Aen. XII. 92. — **124.** l. adiunctus. — **125.** Cf. De Vit, Astipulatus: idoneus testis adprobatus. — **127.** *adsponsio* is not given by the Lexica, but De Vit gives a gloss *adsponsio: testificatio*. — **129.** Cf. *ad luricum: res ad usum apta*, Bod. and cod. Reg. 7641. Hild. emends to *ad ludicrum; res ad ludum apta*. — **131.** l. Epiphania. — **132.** Hebrew word; cf. Prod. 140. — **133.** l. Eden: delicias. — **140.** l. emolumentum: lucrum vel quaestum. — **141.** l. aequiperant: aequant . . . simulant. — **142.** Kaegi reads *equargentus*; but for *ę* Goetz reads *a* or *ae*. After *am* nothing more can now be read. — **145.** Cf. Servius, Verg. Aen. II. 69. — **148.** l. aetas. — **149.** l. sexu; cf. Tacitus Ann. I. 56 — **153.** l. thesaurum. — **155.** Cf. Epin. 4, A 36, *aera: rota caeli*. — **156.** = ἀετός; cf. Serv. Verg. Aen. I. 394. — **158.** aeneatores: tubicines; cf. Paulus 20, 7, and Epin. 1, C 20, *aneatores: tubicines*. — **159.** Cf. Epin. 4, C 2, *aeneada: coniurati aenea*, and Ball. *aeneator: enee coniuratio*. — **161.** Cf. Epin. 4, A. 37, *aethera: possessio caeli ignea*. — **162.** l. aesculus. — **163.** Cf. **158.** l. cornu . . . cantantes. Ball. *aenitatores: cornu canentes*. — **164.** Cf. Serv. Verg. Aen. I. 157, "Aeneadae, nunc Troiani,

aliquando Romani." — **165.** l. aeviternum. — **166.** Cf. Prod. 15, l. aestimiae; cf. Paulus 26, 8, aestimias : aestimationes. — **167.** l. labor inopia. — **170.** l. epos. — **171.** Cf. Porphyrion Hor. Ep. 2. 1, 230, and Placid. 1, 15. — **172.** Cf. APHRODES and Pliny XX. 207, alterum e silvestribus genus heraclion vocatur, ab aliis *aphron . . . semine spumeo*, for gerante l. gerentem. — **173.** l. taedium patior. — **174.** l. affectum. — **177.** Cf. APHTHAE. — **181.** = ἀφορμή. — **182.** = ἅγιος. — **184** ff. l. augusta, etc. — **191.** l. argutus; cf. Servius Ec. IV. 34, Sane quidam *Argo* a *celeritate* dictam volunt, unde verso in Latinum verbo *argutos celeres* dici. — **192.** l. agagula. — **194** and **195.** l. agaso, and cf. **183.** — **196.** Cf. Prod. 396 f., Plac. 10, 8. — **197.** Cf. *Agnati liberi, qui per adoptionem veniunt: interdum cognati* (De Vit). — **198.** Cf. Plac. 12, 8. — **199.** Cf. AGONOTHETA. — **200.** Cf. Paulus 10, 5 ff. Hildebrand, A 67, *agga: festivitas*, which H. emends to *agonia*. **202.** Cf. HAGIOGRAPHA. — **203.** l. aconita. — **208.** According to Goetz *is*, *a* not in MS. — **212.** l. dicitur; cf. Servius Aen. VI. 392. — **214.** So Kaegi. Goetz reads *expediens;* perhaps for *expeditus*. — **216.** l. alternatim : vicissim. — **217.** l. dubitanti; cf. Verg. Aen. IV. 287. — **218.** l. pretiosum. — **219.** l. alluvione; cf. Prod. 160. — **220.** l. navigio. — **221.** Cf. ALOGIA. — **222.** l. alicula. — **224** Cf. Prod. pp. 142, 273, and Paul. 7, 21. — **225.** l. Alpheus. **228.** "Neubauer says *aalma* is a mere repetition of the previous Hebrew word. The double *a* he thinks is introduced on account of the guttural sound of the *a*" (Ellis). — **229.** l. studio saginata; cf. Hild. A 81. — **233.** l. alec; cf. Isidor. Or. XII. 6, 39, *Halec piciculus ad liquorem salsamentorum idoneus;* Ball., *allech genus piscis ad liquorem salsamentorum idoneum.* — **237.** l. alendum : nutriendum. — **245.** Cf. Isidor. Or. XVIII., 60, *Alea* id est *ludus tabulae, inventa* a Graecis in otio Troiani belli *a quodam* milite *Alea* nomine, a quo et ars nomen accepit. See De Vit. — **247.** Cf. Ball., *Alnum, lignum*, .i. *verna*, and see same gloss in De Vit, agnetano, perhaps for *Aquitanum* or *amne altum*. Cf. Isid. Or. XVII. 7, 42, *alnus* vocatur quod *alatur amne*, Proxima enim *aquae* nascitur. Du Cange, "*Vern* Gallis priscis et Britannis est *alnum*. In Borelli Lexico *Vergne, un aulne, arbre dit ainsi.*" — **248.** l. allabitur. — **249.** l. allegoria : aliud pro alio . . . similitudo. Kaegi notes that there is a rasura after *allegorit*, so that perhaps originally *allegorice* or *allegoriter* was written. — **250.** Cf. ABINVICEM, frequent in Vulgate. — **253.** l. alares; cf. De Vit and Hild. A 69. Notice the form *caballares*. — **254.** Cf. Bod., *alebre: quod bene a quibus alitur*, and Loewe G. N. p. 11, under *alero: nutrimentum*. Compare Paul. 25, 4 *alebria, bene alentia*. — **255.** After *pē* there are three or four letters illegible; cf. Isid. Or. XIV 8, 42, *alluvium consumptio riparum ex aquis;* perhaps a gloss on Vulg. Job 14, 19, *alluvione* paulatim terra *consumitur;* l. adcrescente arena; cf. Dig. 19, 1, 13, si decem iugera *alluvione adcreverint*. — **256** and **258.** Cf. Prod. 12. — **257.** Cf. Loewe G. N. p. 11, and Placid. 10, 12. l. altiboans. — **262.** Bod., *exspectat;* cf. Hild. A 76, who proposes "*spe citat* aut *spe lactat.*" — **264.** l. esca. — **265.** Cf. ALSIOSUS; *frigorosus* occurs also Schol. Juv. 3, 190. Cf. Amplon. 269, 224, and 227, *alsosus: frigorosus: alsiosus: frigorosus.* — **266.** l. album; cf. Loewe G. N. p. 127, the full gloss ended thus, *tabula est et habet albis litteris iudices et senatores.* — **267.** l. nutrix. — **269.** l. sibi meatum. **274.** l. delectabile iucundum. — **276.** Cf. above on p. 130. — **277.** Cf. De Vit, l. axilites, which I think goes back to Verrius Flaccus. Cf. Paul. 3, 5, where *alites* follows *axit axites*, and precedes *axamenta*. — **278.** This gloss is also given by De Vit. Perhaps the word has some connection with *Anticyra* (or *Anguitia?*). — **279.** Cf. De Vit, *recertator* seems only to be found in glosses; cf. Amplon. 264, 459, *antagonista: recertator; re-* is used as the equivalent of *anti-* as in the glosses *antidosis: retributio; antidorum: remuneratio*. — **280.** l. anathematus : abominatus, perditus; cf. **293.** — **281.** l. maestificis. — **283.** l. angit : praefocat; cf. De Vit and Hild. — **286.** Bod., *anqueret valde querit.* l. anquirit . . . quaerit, for *scrutat;* see Neue, II. 319 and 320. — **287** and **288.** Cf. ANFRACTUS; *intertortuosa* is not given by the Lexica. Cf. *contortuosa*, Loewe G. N., p. 164. — **289.** = ἀναστενή; cf. Prod. 124. — **290.** l. abominatio. — **291.** Perhaps for anachoresis; (cf. Amplon. 264, 448, *Anchoresis: recessio vel remotio vel recersio*, following *anfractus*,) or for ἀνάπαυσις, N. T. — **293.** Cf. De Vit, l. *perditio*. — **294.** l. apposita. — **297.** Aonia : Boeotia terra. Goetz reads Reoia; cf. Isid. Or. XIV. 4, 11. — **298.** l. zona, suggested by Ellis; cf. C **187**, clima: circuitus tractus vel aona, from which this gloss was made up, hence the position under A. — **301.** l. apiciosus : calvus; cf. Prod. 424. —

302. Cf. Epin. 3, E 30, *abtet vos*: *imple*[*a*]*t vos*. The gloss may refer to Vulg. Hebr. 13, 21, Deus autem pacis *aptet vos* in omni bono. — **305**. Cf. De Vit, l. rei; cf. Bod. *apex: summa pars flamme vel cuiuscumque rei.* — **306**. l. aperit. — **307**. Cf. De Vit. — **308**. Perhaps for apostasis; probably there is a confusion of two glosses. — **309**. = ἀπληστία. l. crapula. — **311**. Cf. Prod. 159. l. probatio; cf. Epin. 1, C 22, *apodixis: probatio vel exemplum.* — **312**. l. apyretus. — **313**. l. apocrypha; recondita. — **315**. Cf. De Vit, qui rebus caret mundanis *Ugut.* ? l. aeviternus. — **316**. Cf. Prod. 159, and De Vit. — **317**. l. apodyterium... lavantium; cf. Bod. *Apodisterium ubi ponuntur res id est in balneum lavantium*; Ball. *Apoleterium ubi ponuntur res lavantium ab exuendo scilicet dictum.* — **318**. ? l. prohibet; cf. **327**, with which perhaps this is confused. Cf. De Vit under *apollire.* — **319**. l. apostropha; aliam . . . subito . . . commutationem. — **320**. l. appetit. — **324**. l. arces: loca summa montium. — **326**. l. artaba: modii tres; cf. Amplon. 262, 304, *artabo: modi tres.* — **329**. l. sidus. — **330**. l. digiti; nodi. — **333**. l. elati. — **335**. l. gravis. — **337**. l. ager sed seminibus aptus (?); cf. Serv. Georg. 1, 1, nam omnis terra, ut etiam Varro docet, quadrifariam dividitur. Aut enim *arvus est ager*, i. e. *sationalis*, aut consitivus id est *aptus arboribus.* — **342**. l. artuatim: membratim. — **343**. l. Arithmeticus. — **344**. Cf. Bod. *Aruntius stelle nomen.* Perhaps for *arcturus*, or can it refer to Arruntius Stella, the poet? — **345**. l. Argivi. — **347**. l. Argei: simulacra; cf. Varro L. L. VII. 44. — **348**. l. haruspex; ad aras. — **349**. l. hariolus, for fariolus; cf. Donatus Phorm. IV. 4, 28. — **353**. l. ardentes. — **354**. l. murorum. — **355**. l. arripit: adprehendit. — **357**. Cf. Prod. 142, and Du Cange, = *harpe*, for which Sil. 3, 278, has *ensis falcatus.* — **360**. gŭlevis (?) Goetz regards as belonging to previous gloss. — **361**. Cf. ARFERIA and Prod. 13. — **365**. Cf. Prod. 430, and Paul. 11, 14. — **366**. Cf. ARBITERIUM, and De Vit, l. collegium. — **368**. l. harmonia . . . vocabulis . . . apta. — **372**. l. armiportator. — **374**. Cf. Hild. A 128. — **375**. l. aqualicum. — **378**. l. aestimator. — **379**. l. inhonestus = ἀσχήμων; cf. Loewe G. N. p. 151. — **382**. l. contemnit, despicit. — **383**. l. hastarium. — **385**. Varro's etymology; cf. L. L. V. 21, 104, Paulus 19, 11. — **386**. = ἄσωτος. — **388**. l. voluptuose. — **389**. l. adflat. — **391**. l. atomi . . . pulveres . . . apparent. Cf. 398. — **397**. l. lugubris. — **399**. l. horribilis. — **400**. l. unumquodque palaestricum . . . victoriam. — **406**. Cf. AULICI. — **408**. l. auspicati, so Bod. — **415**. l. nimbi. — **418**. l. cupidus. — **419**. l. augur; cf. Prod. 107. — **424**. hausta: potata; cf. Bod. *austa: eputata.* — **425**. l. hausit: gustavit. — **426**. Cf. De Vit, *aureax: equus solitarius.* — **427**. Cf. Plac. 11, 10, *Austrarè: humefacere, dictum ab austro, qui est pluvialis.* — **429**. Cf. Gloss. Isid. *auctoratio: venditio nam sub auctione sunt gladiatores qui se vendunt* (De Vit). — **430**. l. venditionis. — **433**. l. auctionarius; emit. — **435**. l. solem. — **436**. l. aulaeum: stragulum; cortinae in the sense of curtain, as in the Vulgate. — **437**. venerabile sanctum. — **438**. l. avitum: antiquitas vel ab avis; cf. Bod. *avitum antiquas vel ab avis relictum.* See Hild. — **439**. l. augustius. — **442**. l. haurire. — **444**. l. auctio; venditio. — **445**. l. venator. — **448**. l. agitator.

B.

1. Abbreviation of some fuller gloss. as in Hild. B 6, note, *Bacchum vinum et pro vino quod a Libero patre inventum esse fingunt poetae.* — **2**. l. bacchat. — **3**. l. bacchi; cf. Bod. *bacci: antiqui*, perhaps only the beginning of a gloss *antiqui dicebant*, etc., or as Hild. l. c. suggests from *Bacchus, vinum vetus.* — **4** refers to Verg. Aen. I. 655; cf. Prod. 56. — **5**. refers to Verg. Aen. IV. 301. — **6**. Cf. Prod. 69. — **7**. Goetz reads *anfora*, but Kaegi confirms my reading, which is of course a corruption for *amphora;* cf. Ball. *batus amphora una ·i· modii tres.* See Isid. Or. XVI. 26, 12. — **9**. l. pagani sacrarium Liberi; cf. Prod. 57. — **10**. A vulgar form for *bacelus* = βάκηλος; cf. Prod. 57, f. — **11**. l. babigera; cf. B 24 and Bod. *baligera stulta*, Ball. *babiger stultus*, and see Prod. 54. — **12**. l. bacchationes, furores. — **13**. l. Bacchae. — **14**. See above p. 134, Bod. *baubant: latrant.* — **15**. Cf. Prod. 55. Du Cange quotes from Gaufridus Grossus Vita S. Bernardi Abbat. de Tironio, p. 62, "*Bacapulo decentissime palliato superpositus.*" Paulus 61, 12, defines *capulum* as *quo mortui efferuntur.* — **16**. l. obesas; cf. Prod. VIII and 66, Vindob. 2404, *bassas: pingues aves*, so that the fuller gloss was *bassas: pingues, obesas;* cf. Martyrius (K. VII. 176) *bassus etiam, id est grassus, in glossematibus reperi.* — **17**. l. bassum, and

cf. Du Cange s. v. — **21.** l. regulus; cf. Loewe G. N. 149. — **24.** Cf. B **11.** — **25.** Cf. Caper de orthographia (K. VII. 103) *Bargena, non bargina, genus cui barbaricum sit,* Martyrius de B et V. (K. VII. 175) *Bar,* cum incipit syllaba, *b* mutam habuerit positam ut *barrus* ἐλέφας *bardus* ἀναίσθητος, *bargus* ἀφυής, *barba* et quod in glossematibus inveni *bargina* ἡ προσφώνησις βαρβαρική. Hence emend Bod. *barciae: barbari.* — **26.** l. cubicularius; cf. Prod. 76. — **27.** l. Bacchi latex; cf. Serv. Aen. I. 686, *Laticemque Lyaeum latex* proprie aqua est fontium . . . sed et *vinum latet* intra uvam, unde nunc dixit *laticem.* — **28.** Cf. above B **5.** — **29.** Cf. Loewe G. N. 97. Deuerling Plac. 13, 12 n. cites a gloss *baxea: genus calciamenti mulieris, quas baccheas dicunt.* Of some such gloss this is an abbreviation. Loewe quotes de dubiis nominibus (Keil V. 572) *baxeas: calciamenta feminarum ut Varro dicit.* Ellis suggests *baxellas* for *buccellas.* — **30.** A corruption of some fuller gloss referring to Verg. Aen. III. 421, *barathri ter gurgite* (hence? *gurgugite*); cf. Hild. B 13 and 14. — **33.** l. baptismum. Koffmanne Geschichte des Kirchenlateins I. p. 21, speaking of baptismus, says, "das Volk scheint *lavacrum* als Benennung für den Vorgang geliebt zu haben." — **34.** l. barbitos . . . cf. Porphyr. Hor. Car. I. 32, 3, "*barbiton organi* genus est, sed nunc pro lyra posuit." — **35.** l. Bassarides: Bacchae; cf. **43.** — **36.** l. Portuni: Neptuni; cf. De Vit under *Portunus.* — **37.** l. plena; cf. Prod. 62 and Plac. L. G. 12, 6. — **39.** l. bargus, explained by Cassiodorius and Martyrius (K. VII. 175) as ἀφυής; cf. Buecheler Rh. Mus. 35, p. 70.— **40.** l. barbiton; cf. Prod. 65. — **41.** l. barritus. — **43.** l. Bacchae. — **45.** l. faciam. — **46.** l. Bariona . . . columbae; cf. De Vit Onomasticon I. p. 677. — **47.** l. Bartholomaeus: filius suspendentis aquas; cf. Ball. *Bartholomeus filius suspendentis aquas vel filius suspendentis me, Syrum est non Hebreum.* — **48.** Cf. BRABIUM, BRABEUM, l. munus. — **49.** l. Bracata: Gallia; cf. Bod. *Bracata gillea.* — **50.** Cf. BRABEUTA. — **51** = βλάξ; cf. Prod. 133. — **52.** l. blatit . . . perstupide; cf. Plac. 12, 18. — **53.** blapere for which blatire is the correct form. Wiegand (Deutsches Wörterbuch) compares *plappern, blappern* with mid. Latin *blaberare* for *blaterare.* — **54.** Cf. BLATTA l. purpurae. — **57.** l. Beelzebub; cf. De Vit Onomasticon. — **60.** l. beryllus . . . candidi. — **65.** betere must be regarded as an imperative from bitor, biti. For a full discussion of these glosses see Loewe G. N. 196 ff. and Prod. 359. — **66.** l. Beelphegor: simulacrum; cf. Onomasticon. — **68.** Cf. Bod. *buteo avis,* Ball. *buto genus animalis.* l. buteo: avis quae in auspicio servatur = observatur; cf. Paulus 3, 5, *Alites volatu auspicia facientes istae putabantur: buteo, sanqualis, immusulus, aquila vulturius;* see also Paulus 32, 7, and Pliny N. H. X. 21. — **69.** l. beluis: bestiis; cf. **99.** — **70.** l. Belidae: a Belo patre; cf. Serv. Aen. II. 81. — **73.** l. bellicosa . . . inferorum. — **74.** l. bellus. — **75.** l. cupidus est, *locus bellicosus* seems to be a corrupt repetition. — **78.** l. BREPHOTROPHIUM = βρεφοτροφεῖον. — **79.** l. putidi aut hircosi; cf. Prod. 265 and Bod. *blenones: putidi hercones,* Ball. . . . *aut hircosi.* — **80.** l. BLAESUS. . . . alio sono corrumpit; cf. Prod. 394. — **82.** l. bibliotheca. — **83.** l. bibliopola. — **84.** Abbreviation of a fuller gloss like *bibulus: bibitor qui valde bibit;* cf. Hild. B 34, *Bibulus, bibitor qui multum bibit.* — **85.** Cf. BIBLUM. l. funis. — **86.** l. Bisaltes or? Ephialtes, corrupted into Epialtes; Ebialces; bialcis; but it may be a compound of βιά . id ἀλκή. — **89.** l. bigamus . . . habet uxores. — **90.** l. biclinium; cf. Loewe G. N. 150. — **91.** Cf. Hildebrand B 35 n. and Du Cange. — **92.** l. bibliothecarius; cf. Prod. 72, where Loewe emends to *qui codices servat.* — **94.** l. bidento; cf. Du Cange. — **95.** l. bifidum; Cf. Prod. 75. — **98.** l. commotio. — **99.** l. beluae. — **100.** l. byssum: sericum tortum; cf. Bod. *bissum: siricum tortum.* — **101.** l. bivira . . . maritos; cf. Prod. 73. — **104.** Cf. above, B **65.** — **105.** l. bigenerum — e duobus generibus; cf. Paul. 33, 14, *bigenera dicuntur animalia ex diverso genere nata,* and Bod. *bigenerum e duobus generibus conceptum.* — **106.** l. vespillo(nes): qui mortuos portant; cf. Hild. B 44 and Paul. 368, 17, *Vespae et vespillones* dicuntur, qui funerandis corporibus officium gerunt, non a minutis volucrebus, sed quia vespertino tempore eos efferunt, etc. Georges says that the best MSS. and glosses have *vispillo.* — **107.** l. bimatus = bimater; cf. Amplon. 278, 35, bimatur: liber pater, and Inscr. in Bollett dell' Inst. Archæol. a. 1854, p. xxxvi. Leiber pater bimatus Iovis e fulmine natus (cited by De Vit Lex.). — **108.** Cf. Glossae in Sidonium ed. Ellis in Anecdota Oxoniensia, vol. I., part V., p. 31, *Talassa* enim Graece Latine dicitur *mare.* Inde *bitalassum* .i. *duplex mare,* ubi duo .s. maria concurrunt .i. ubi quaedam terra se extendit in mare ita ut acutum terrae illius mare habeat ex utraque

parte sui. Unde dicitur quod Paulus naufragatus est *in bitalasso*, and see Amplon. 276, 33, *bathilasa, ubi duo maria conveniunt;* Epin. 6, A 16, *bythalass. ubi duo maria conveniunt;* Bod. *bitalasis, periculum duorum marium*, whence emend here *bithalassum*, etc. — **110.** l. gigantis. Hyginus, in his Introduction, mentions among the Giants immediately before Ephialtes (see above, **86**) *Alemone*, which Munck proposes to emend to *Alcyoneus*. Perhaps it is the same word with *Bitemon*, which is not given in the Onomasticon. Otherwise one might think of Verg. Aen. V. 372, Victorem Buten immani corpore. — **113.** Cf. **65** and **104.** — **114.** l. Byrsam . . . bubulum; cf. Serv. Aen. I. 367, Bod. *Birsum corium bubuli.* — **115.** l. centimanus. — **116.** Cf. **65.** — **117.** Cf. BIMO. l. duplatur; cf. Paulus 67, 2, *duplabis duplicabis.* — **118.** l. bipedalis. — **119.** *duobus* is dat. after *erogat*, as in Cic. ad Att. 8, 5. — **120.** Cf. Plac. 15, 8, *bipennem*, bis *acutum*, *pennum* enim dicimus *acutum;* cf. Hild. B 42 and Isid. Or. XIX. 19, 11, nam *bipennis* dicitur, quod ex utraque parte habeat *acutam aciem* quasi *duas pennas. Pennum* autem antiqui *acutum* dicebant. — **121.** Cf. Plac. 13, 4, *Bova* vehemens *rubor*, interdum *genus serpentis*, and Paul. 30, 14, *bova* serpens est aquatilis, quem Graeci *οὖρον* vocant, a qua ĭcti obturgescunt. Crurum quoque *tumor viae labore* collectus *bova* appellatur. — l. rubor vehemens, and **122**, ingens . . . crure . suffuso; cf. Prod. 312 f. and G. N. 231. — **123.** Cf. Amplon[2] 278, 72, *burrus: rufus, niger*, Amplon [1] 277, 101, *boarris, rufis, niger*, and Epin. 6, E 10, *barsis, rufus, niger.* l. burrus; but perhaps *rubus* = *ruber* may be retained; cf. Paul. 264, 10, *Robum rubro colore et quasi rufo significari*, etc. — **125.** l. burrae; beginning of the gloss found Plac. 13, 16, *burrae varroniae, fatuae ac stupidae*, etc. — **126.** l. clamare. — **127.** l. herede; cf. Prod. 78. — **128.** l. Bosphorus. — **130.** l. bovinatores: inconstantes; cf. Plac. 13, 6. *Bovinator, tricosus et inconstans*, and Nonius, 79, 25, *bovinatores, quos nunc malitiosos et tergiversatores dicimus.* Lucilius lib. XI. Hic'st tricosu' bovinatorque, ore improbo duro; cf. Prod. 319. — **131.** l. bombus; cf. **135** and Bod. *bombus sonus tumidus, imitatio vocis vel crepitus.* — **132.** Cf. other glosses of *brocchus* in Prod. 80 and 391, and G. N. 144. — **134.** l. Bootes; cf. these glosses cited by Loewe Prod. 84 f. *butis: stella comis qui quasi comas habet; betes: stella comites quae quasi comam habet;* and see Serv. Aen. X. 272 (Thilo, p. 422, 18) est etiam alter *cometes*, qui vere *cometes* appellatur; nam *comis* hinc inde cingitur, hic blandus esse dicitur qui si orientem attenderit, laetas res ipsi parti significat, etc. — **138.** Cf. Varro L. L. VII. 39, 40, *Luca bos elephas*, . . . *Lucanam bovem quod putabant, Lucam bovem appellassent.* — **139.** l. storea; cf. Prod. 82 f. — **140.** Cf. Serv. Verg. Ec. 8, 86, *bucula, bovis est diminutio.* — **141.** l. bombum; cf. Prod. 77 and G. N. 138, where Loewe cites from Vat. 1468, *bombum: sordidum*, and proposes to read *bombum: sordidum sonum*, but this seems to me very doubtful; cf. Hild. B 52, 53, and Bod. *Bubum: sorbellum.* I prefer to keep *sorbillum* = the sucking sound accompanying drinking. — **142.** Cf. note to **144.** — **143.** l. bombosum: sonorum furibundum, so Bod. — **144.** Cf. Paul. 32, 4, *Bustum* proprie dicitur locus, *in quo mortuus est combustus* et sepultus, diciturque *bustum*, quasi *bene ustum;* ubi vero combustus quis tantummodo, alibi vero est sepultus, is locus ab urendo ustrina vocata: sed modo busta sepulcra appellamus. Cf. Servius Verg. Aen. XI. 201. — **145.** Cf. BUCETUM. — **146.** Cf. Prod. 83. Bod. *Burca: clavaca;* see Du Cange, under *Burca.* — **147.** Cf. BUCERUS. — **148.** *buceriae* is found in Lucretius 2, 663 (Mun.) *lanigerae pecudes* . . . *buceriaeque greges*, but *bucera* in Ovid Met. VI. 395, *lanigerosque greges armentaque bucera* pavit; cf. Hild. B 62. — **149.** Onomatopoetic word; cf. Du Cange under *bunda.* — **150.** Bod. *Bulones ipsi sunt cetari qui diversa genera piscium vendunt*, so Hild. B. 66; cf. Plac. 13, 9, *Bolona*, redemptor *cetariarum* tabernarum in quibus *salsamenta* condiuntur, quas *tabernas vulgo cetarias vocant. Bulonium* seems to be an abstract like *mangonium* (cf. *sterquilinium*) l. lutum . . . cetarii; but perhaps there is some confusion with *bolbiton.* Loewe Prod. 77 reads *puto* for *luto.* — **151.** Cf. BOTRUS = *βότρυς.* — **152.** l. buccones refers to Plaut. Bacch. 1088, stulti, stolidi, fatui, fungi, bardi, blenni, buccones; cf. Isid. Or. X. 30, *Bucco* garrulus, quod ceteros oris loquacitate non sensu exsuperat, and Prod. 265. — **154.** l. bubinare menstruo; see above, p. 131. — **155.** Cf. BUSTUARII. — **156.** l. avis nocturnae. — **158.** l. bruta: stolida; cf. Bod. *Brunda: solida*, and Prod. 81. — **159.** Cf. BURGUS. — **160.** See note to **123.** — **161.** Cf. BUSTICETUM. — **162.** Cf. BULLO. — **163.** l. brutus insipiens; cf. Ball. *bruti stulti insipientes;* Bod. *Brutus, stultus gravis stupidus, hebes, insipiens.*

C.

4. Cf. Paul. 48, Plac. 30, 3, *cassiculo, reticulo, a cassibus.* — 5. l. catechumenus. — 6. l. catechizat . . . edocet. — 7. l. caballus; cf. De Vit. — 8. l. canon. — 9. l. cachinnus. — 10. l. conplosus; cf. Prod. p. XIV. Ball. *caplosus: elisus;* Bod. *inlisus.* — 12. l. robur. — 13. l. capedo. — 14. l. categorias: adscriptiones; cf. *Catagoriae: ascriptiones, accusationes* (Papias). Notice peculiar use of *adscriptiones.* — 15. Bod. *caletra;* cf. Cod. Leid. 67, E, *Caletra: ubi vespe nutriuntur,* and Amplon. 286, 62, *caloetra, ubi vespe nascuntur.* Prod. p. 46 n. = κοιλήθρα? — 17. Bod. *campe;* cf. Prod. 332 and Paul. 44, 1; see above, p. 131. — 18. l. supplicii eculeo simile. — 19. I can find no such river in Thrace. Perhaps a corruption of Causter = Cayster: fluvius Asiae. — 21. l. chalybs. — 22. l. camuris cornibus; cf. Servius and Philargyrius to Verg. Georg. III. 55. Paul. 43, 17, *Camara* et *camuri* boves a curvatione ex Graeco κάμπη dicuntur. — 23. l. canoris: chordis refers to Verg. Aen. VI. 120, *fidibusque canoris,* where Servius explains *bene sonantibus chordis.* — 24. Cf. Prod. 95 and expressions like *in calce epistulae, in calce libri.* — 25. l. carchesia . . . poculi; cf. Serv. Aen. V. 77. — 26. l. iocum convicium; cf. Paul 46, 10, and Epin. 7, C 5, *cavillatio: iocus cum vicio.* — 27. l. discissus. — 28. l. chamaeleon . . humilis; cf. Ball. *caleon: humilis leo.* — 29. Cf. Prod. 146 and Du Cange under CATAPOTA. — 30. l. calamaula = καλαμαύλης . . . canitur; cf. Phill. *calamaula canna in qua canitur.* There may have been some confusion with cana mala in C 49. — 31. l. Carystius. — 32. Cf. Plac. 20, 9, *Candys, vestis regia.* — 34. Cf. C 374. Nonius p. 25, 13, '*catax* dicitur, quem nunc *coxonem* vocant Lucilius . . . Hostiliu' contra Pestem perniciemque *catax*; cf. Prod. 308 f. — 35. l. carchesia; cf. De Vit. *Carteriae: sunt in cacumine arborum per quas funes trahuntur.* — Macrob. V. 21, Asclepiades autem . . . *carchesia* a navali re existimat dicta. ait enim navalis veli partem inferiorem πτέρναν vocari, at circa mediam ferme partem τράχηλον dici, summam vero partem *carchesium* nominari, etc. For *vel* therefore *veli* is probably to be read, and perhaps the fuller gloss had anterior pars. — 36. ? The first part is perhaps a corruption of calo: servus; cf. Acron. Hor. Ep. I. 14, 42, *Calo, servus unde calones.* — 37. Catasceue is used by Servius Aen. II. 409. — 38. l. capitibus . . . hasta vendebatur. — 40. l. minister sacrorum. — 42. Cf. Du Cange under CALAMAULARIUS. — 43. ? There is evidently some connection with Castalia, Castalis, perhaps for Castalides: deae elocutionis. — 44. This gloss added by a second hand contains a mixture of two glosses, casnar: senex = 115, and captiviginae: ex captivo natae. *captivigena* is formed like *alienigena,* but is not found in the Lexica nor in Du Cange. — 45. Cf. Mon. 6210, *casu: eventu fortuito.* I cannot explain *pro eventum,* unless *proventu* was added as an explanation of *eventu.* — 46. So Serv. Æn. III. 265, *casum, periculum.* — 47. De Vit gives a gloss *Candaulus:* γάνδαυλος; *edulium ex carne elixa, pane, et caseo Phrygio cum anetho et pingui iure.* Hence read candaulus: edulium; cf. κάνδαυλος or κάνδυλος. — 49. l. cana mala: lanunigem habentes id est cydonia; cf. Serv. Ec. 2, 51. — 51. l. instabilis; cf. Prod. 4. — 52. l. tela; the first part of gloss refers to Verg. Georg. III. 371 (where Servius glosses *cassibus* with *retibus*) and the second part to Georg. IV. 248. — 53. Cf. CARTALLUS. — 55. l. catervatim; cf. Verg. Georg. III. 556. — 56. l. detrahit. — 57. Perhaps a confusion of two glosses, as calculosus: glareosus, lapideus = lapidosus, and calculus: victoria iudicum. — 58. l. caulae; cf. Paul. 46, 12, and Serv. Æn. IX. 60. — 59. l. calculum. — 62. l. catalogus. Bod. *catalogus iustorum* (l. *iuxta rem,* Ellis) *numeratio ordo vel series.* — 64. Cf. following glosses cited by De Vit: *cantabrum; furfur caninum quo canes pascuntur, purgamenta tritici; cantarinum vel cantarum, equus castratus.* Du Cange gives "*cantabrum* pro *cantharus,*" which would come nearest to this gloss. — 65. l. caduceum. — 67. Cf. Gloss. Pap. *Capedines: animalia dicta, quod manu capiantur,* (alii omittunt *animalia dicta*) De Vit. — 69. l. vafra; cf. above p. 131, Phill. *carisa: vafer.* — 70. Abbreviated for Caulae; cancelli tribunales ubi sunt advocati; cf. De Vit and Hild. C 56. — 71. l. cataplum. — 72. Goetz reads *gravia,* but Kaegi *gruia* l. grata; cf. Mai. VI. 513, *canora: cantu grata.* — 75. Is the same gloss, I think, as that given by Du Cange, "*Ceragius, Cereagius, Pistor, qui ad modum cerae agit et deducit pastam.* Glossar. Provinc. Lat. ex cod. reg. 7657, *pestre,* Prov. *Ceragius, arteco-*

pus, panetarius;" or perhaps for *cereasius.* Compare De Vit under *Cerialis* and *Carensis*, both glossed as *pistor.* — **76.** l. castus sacer, or perhaps catus: acer; cf. Plac. 21, 17, catus, acutus, callidus, sapiens, prudens. — **77** and **78** = χάρισμα l. spiritale . . . divinae gratiae. — **79.** Cf. Lucan. V. 379, *Calabroque obnoxius Austro.* — **80.** l. cataclysmum: diluvium. — **81.** Cf. Bod. *careo: amitto, nolo, perdo.* — **83.** l. cadus: amphora semis; cf. Bod. *cadus: amphora est habens urnas tres.* — **86**? Cf. Mai. VIII. 142, *carrire: dividere, secernere, seiungere.* — **87.** l. caligo: tenebrae. — **88.** l. caculae: servi; cf. Plac. 23, 23, *Caculae, lixae aut servi militum.* — **90.** l. cocula; cf. Paulus 39, 3, *Cocula: vasa aenea*, coctionibus apta, alii *cocula dicunt ligna minuta*, quibus facile decoquantur obsonia; see Loewe G. N. 206 f, and below, **341.** — **92.** l. cadaver. The etymology is found in Servius Æn. VI. 481. — **93.** l. calvitur; see above, p. **132.** — **94.** l. capissit: tenet, libenter accipit. — **95.** Loewe cites this gloss G. N. 151 among the *difficilia*, but as Prof. Gildersleeve has pointed out to me, it refers to καδμεία νίκη l. victoria non bona. — **96.** l. iocatur . . . calumniam; cf. De Vit. — **97.** Cf. Serv. Æn. III. 580, *caminis; fornacibus* Graece dixit (ἀπὸ τοῦ κάειν). — **98.** l. capillatis: capillis porrectis; cf. Hild. C 37. — **101.** Cf. CHALYBS. — **102.** l. Capitolinus . . . capitolio. — **103.** Cf. CADUCUS l. daemoniacus. — **104.** Cf. Plac. 27, 15, *cancros: cancellos*, and Paulus 46, 2, *cancri dicebantur ab antiquis qui nunc per diminutionem cancelli.* — **106.** Cf. Prod. 97, *capite absoluto: capitis periculo liberatus.* — **108.** l. casses: nom. pl.; see Neue Formenlehre I. p. 385. — **109.** Cf. CHARISTIA. — **110.** l. capulum; cf. Paul. 61, 12, *Capulum* et manubrium gladii vocatur et id *quo mortui efferuntur* utrumque a capiendo dictum. See **112.** Serv. Æn. XI. 64, *feretrum* locus *ubi* mortui feruntur . . . Latine *capulus* dicitur. — **111.** l. capides; cf. Loewe G. N. 137. — **112.** l. spathae; cf. **110** and De Vit. — **113.** Cf. CAPERATA. — **114.** Cf. Paul. 47, 8, *Carinantes probra obiectantes, a carina dicti quae est infima pars navis; sic illi sortis infimae;* Serv. Æn. VIII. 361, *carinare* autem est *obtrectare*, Ennius contra *carinantes* verba atque obscena profatus alibi neque me decet hanc *carinantibus* edere chartis; cf. Prod. 14. — **115.** Bod. *canier leno.* Loewe Prod. 306 f, quotes this gloss from several glossaries, in some of which *leo* occurs; Cod. Leidensis 191[3] has *camer leo capoleos*, where *capoleos* seems to belong to a new gloss; the liber glossarum has *caniet: leno.* Loewe's conjecture that *canierleo* or *camerleo* or *canietleno* stands for *camelleo*, i. e. χαμαιλέων, is most probable (cf. *cameleon*, **141**), otherwise one might think that *canierleno* or *canietleno* was a corruption of *cantilena: cantellena*; cf. **139**, cantus: cantellena, and compare Plac. 28, 6, *cantilenas, fraudes dolosque.* — **116.** l. casnar senex, Bod. *canar senex;* cf. Plac. 24, 6, *casnar, senex*, 29, 8, *casnari seni, Oscorum lingua.* Paul. 47, 12. Epin. 7 A 19, *cassinur: senex.* — **117.** = καλαμίσκος. — **118.** Cf. καρυίσκος, used in the Septuagint for καρύινα κεράμια = Lat. carenariae. The gloss given by Mai. VII. 553, *Calamostros, iscos vel cariscos quasi in nucis modum deformatos*, is evidently a confusion of this and the previous gloss. — **119.** l. caudices . . radices. — **121.** Cf. Serv. Æn. XII. 100. — **122.** l. observa. — **123.** One might be tempted to read acinacem (this form occurs Arnob. VI. 11), but by so doing we should lose a very good illustration of the way in which glosses were collected. In Servius Æn. I. 75 (Thilo.) we read errant namque qui dicunt ideo 'pulchra' dixisse propter *Canacen* (*canacem* L. *cavacem* M) et *Macareum* (*machareum* BM) in se invicem turpissimos fratres, etc. Some stupid gloss-hunter read here *canacem est machareum;* and interpreted *machareum*, i. e. *machaerium* (cf. *macherio* Plaut. Aul. 393), by *gladium*, a more familiar word. In the same way, our very next gloss, **124**, capessere: capere [invadere] frequenter, is an alteration of Servius note to Æn. I. 77, "*capessere autem est saepe capere.*" Here he substituted *frequenter* for *saepe.* — **125.** l. scopula, which Hild. C 59 changes to scopuli, but the neuter was doubtless vulgar, as *puteum* and *sarcophagum*; cf. Rönsch. p. 270 f. — **126.** Perhaps originally there were two glosses, *callidus: astutus* and *calliditas: astutia.* — **127.** l. sollicitus. — **129.** cf. CANICULARIS. — **132.** l. succensa. — **133.** l. consessus; cf. Serv. Aen. V. 340, *cavea consessus est populi.* — **135.** Cf. Prod. 258 and Nonius 45, 28, Calcitrones, qui infestant calcibus (Plaut. Asin. I. 3, 11). — **136.** l. CEONOMYIA. — **137.** ? caristeum = carysteum; cf. De Vit *caristeum: marmoris genus dictum quod gratum sit scultoribus* (Gloss. Pap.). — **138.** l. calones: galearii; cf. Prod. 45. — **140.** l. caulae: cancellum; cf. above, **70.** — **141.** l. chamaeleon . humilis. — **142.** l. lentis consimile. — **143.** l. caltha; cf. Plac. 22, 9,

Callo, genus quoddam floris vel herbae. — **144.** So Epin. 7 A 15, and Amp. 280, 40; cf. Hild. D. 402 note, "*Duvium: clanculum ambiguum.* . . . S. Germ. *clangulum mane*, ubi lux dubia est." See, however, Censorinus 24, secundum *diluculum* vocatur *mane*, where D has DELUCULUM. Read therefore *diluculum: mane.* — **145.** l. claudier; cf. Ter. And. 573. — **146.** Cf. Plac. 22, 2, *classicum canit, celeuma navis dicit*, Serv. Aen. VII. 637, *classicum dicimus et tubam ipsam et sonum.* For *celeuma* and *celeusma* cf. Saalfeld's Tensaurus. — **148.** l. clangor. — **149.** l. occultae. — **150.** l. τῇ τύχῃ (so Goetz). **151.** l. claudire: claudicare, or clandire: clandicare; cf. Prod. 357. — **153.** I doubt the existence of a verb *classicare*, perhaps for classica [sonan]t; cf. Verg. Aen. VII. 637. — **154.** l. chaos. — **155.** l. crapula: ebrietas. — **156.** l. clarigatio. — **158.** l. serraturae. — **160.** = τὸν φίλον. **160** and **163** constituted, I think, originally one gloss καίπερ τὸν φίλον: superque amicum, the *amicum* was perhaps written above the line for lack of room, and so two independent glosses sprang up. — **161.** l. finis sermonis. — **163.** l. clava. — **166.** l. chelys. — **167.** Cf. Isid. Or. VII. 12, 2, Propterea ergo dicti *clerici qui de sorte sunt domini.* — **168.** = κληρονόμος. — **170.** Cf. Nonius 20, 13. — **172.** l. gliscit: crescit, taken from Serv. Aen. XII. 9, *Gliscit crescit*, et latenter, unde et *glires* dicti sunt quos pingues efficit somnus; cf. Paul. 98, 9. — **174.** l. paralyticus. — **175.** Cf. above p. **100** — **177.** l. ceruchis; cf. Lucan VIII. 177. — **178.** Loewe Prod. 364 thinks this a corruption of **184**, clues: pollex; perhaps these were the steps, *pulles, plules, pluvies, pluvia.* — **180.** l. clepsydra per quod horae colliguntur. — **182.** Cf. Ball. *clibanus fornax vel furnus*, and De Vit, *Clibanus argenteus; furnus mobilis placentis et panibus coquendis aptus, alias ex testa, ferro vel aere fiebat*, Gloss. ad Petron. Sat. 35. l. furnus testeus? cf. Isid. Or. XX. 2, 15, *clibanitius in testa coctus.* — **183.** l. CHIROGRAPHUM. — **184.** Cf. Prod. 364. — **185.** Cf. CLIBANARIUS and Hild. C 110. — **186.** Cf. CLIMACTER. — **187.** l. zona; cf. A 298. — **188.** Cf. CLYPEUS (Forcellini De Vit III.). — **189.** l. caelebs. — **191.** Cf. χέρνιψ and De Vit under chernibs. — **194.** l. celoces: veloces, used as adj. by Plautus. — **195.** l. caenum . putridum. — **196.** Perhaps a repetition of **190** or a corruption of caelestinus. — **197.** l. caeruleus. — **198.** l. celeber: frequens. — **199.** De Vit gives *Caecua et caecuma; noctua quae lucem fugit*, Müller, Ed. Festus Corollarum Glossarum p. 381, has *Cicuma avis noctua.* l. cicuma = κικύμη κίκυμος; cf. Saalfeld's Tensaurus. — **206.** l. uxore . . . caelo; cf. Paul. 44, 5, *Caelibem* dictum existimant *quod dignam caelo vitam agant.* This etymology was repeated by Donatus, Priscian, Hieronymus, Beda, and Isidorus. — **207.** l. cerastes. — **208.** l. est caelicola. — **209.** l. caerimonium. — **210.** l. minutorum. — **211.** l. Cananaeus (or Chananaeus): possidens sive possessio, ita autem dictus Simon a vico Cana; cf. Isid. Or. VII. 6, 12, *Cainam lamentatio vel possessio eorum: sicut enim Cain possessio*, etc. Cf. Onomasticon under *Cain, Cainan, Chananaei*, and *Cana.* There seems to have been a confusion of *Cana* and *Canaan.* — **214.** l. caerula; cf. Serv. Aen. III. 64, Veteres sane *caeruleum nigrum* accipiebant. — **217.** l. ciccum; cf. above p. **131.** — **218.** Cf. Mai. VI. 512, *Caei; iudicatores*, and 530, *Kaii; cancelli* (an hunc spectet, viderint doctiores, De Vit). *Cei iudicatores* Gloss. Sangerm. *Kays: cancelli.* (De Vit). Diez connects fr. *quai* with *Kays.* The gloss *cancelli* would seem to point to an identification with **140**, *caule: cavellum ante iudicem*, and **70**, *caulae* [cancelli tribunalis] *ubi sunt advocati. caule* dropping the *u*, as *augustus, agustus*, would give *cale*, which, palæographically, is very nearly *caei*, = *cei;* but I think Cei may refer to Cic. Div. I. 130, and the gloss was taken from the same source as **227.** Notice that Cei is followed by cere and Cea by cerealia. — **219.** l. Ceres. — **220.** l. chelidon (χελιδών) hirundo. — **221.** l. cercurus. In Stich. 413, A has CIRCULO, B C D, *cercuro.* — **222.** l. Cimmerias, silvas. — **223.** l. caenum: luti vorago; cf. Isid. Or. XVI. 1, 2, *Coenum est vorago luti.* — **224.** l. certiscat; cf. Nonius 89, 20, *certiscant, certa fiant* Pacuvius chryse. "Atque eccos unde *certiscant*," but Rebbeck reads *certiscent.* Perhaps *certiscat* to be read. — **225.** l. Cecropidae: Athenienses; cf. Serv. Aen. VI. 21. — **226.** l. CEDRON. — **227.** Cf. Serv. Georg. I. 14. — **232** and **233.** Cf. CERASTES, Saalfeld Tensaurus. — **234.** l. CERRITUS . . . commotione cerebri; cf. Paul. 54, 14, cerritus, furiosi. — **238.** l. ac si. — **239.** l. cecinit. — **243.** l. censuit: deliberavit. — **244.** l. cerebro . . habet. — **245.** l. chelydrus. — **246.** Cf. Serv. Aen. X. 894, *cernuus* dicitur equus qui *cadit in faciem.* — **247** and **249.** Cf. κενοδοξία. — **248.** Cf. Verg. Aen. V. 778. — **250.** l. succumbit. — **252.** l. caespes; cf. Plac.

23, 2, *caespites, frutices*, etc. — **254**. l. commentum. — **260**. Cf. **155**; cf. Amplon. 290, 279, and 298, *crapula nausia potum vel indigestio* and *crapulatus: vino obrutus*. Here we probably have a confusion of two glosses, *crapulatus: inebriatus* and *crapula(m) nausia ob potum;* but the form *crapulam* may be retained referring to Pseud. 1270, or Most. 1108; cf. Plac. 24, 8, *crapula, cruditas levis*. — **263**. l. crepundia. — **264**. l. crebro; compare It. spesso. — **265**. Cf. Bod. *crepidinem: summitatem riparum* . . Plac. 20, 3, *crepido, saxi extremitas rimata et cuiuslibet rei alterius*. See Hild. C 483 note, where H. emends *rima* to *ripa*. — **266**. l. spissavit. — **267**. l. generat. — **268**. Loewe Prod. 406 proposes to read *creperae: incertae, dubiae*, which he admits to be "medela audacissima." Cf. Paul. 52, 18, *Creperum: dubium unde increpitare dicimus quia maledicta fere incerta et dubia sunt*. I am inclined to think that *in corp*[*ore dub*]*itare* is in some way a corruption of *increpitare* of Paulus; cf. Hild. C. 485. — **269**. Compare the fuller gloss cited by Loewe l. c., which begins, *Crepusculum tempus inter finem noctis et initium diei*. — **270**. Cf. also Serv. Aen. I. 268, (*crepusculum*) est dubia lux nam '*creperum*' *dubium* significat. — **273**. l. chrisma. — **274**. l. cristatus; cf. Verg. Aen. I. 468, *cristatus Achilles*, but there is probably a confusion of two glosses; cf. CHRISMO. — **275**. l. crinitior. — **276**. l. crocitus; cf. Loewe G. N. 250 f. — **278**. Cf. Paulus 55, 10, *Crustumina* tribus a Tuscorum urbe *Crustumena* † dicta est; cf. Serv. Verg. Georg. II. 88, *Crustumina* sunt pyra . . . ab oppido *Crustumio*, and Aen. VII. 631, *Crustumerium* dicitur; cf. Onomasticon. — **280**. l. cycneum or cygneum. — **281**. So explained by Serv. Aen. VIII. 642. — **282**. l. Cynthia. — **283**. l. cito tramite: cursu refers to Aen. V. 610. — **285**. l. circumsaeptus. — **286**. l. circumplexus. — **287**. Ball. *civicans*: *civem faciens*. l. civicat; cf. CIVICO and Loewe G. N. 164, where, however, from Ambr. B. 31, *civitat: civem facit*, he accepts *civitare*, which Hild. C. 95 n. rightly condemns. — **289**. Cf. Lucan III. 228, Itque *Cilix* iusta iam non *pirata* carina, and Hild. C 83. — **290**. Cf. Hild. C 92. l. cisium; but perhaps *cirsium* was the original form, whence *cissium, cisium*, which would account for rhotacism not taking place. — **291**. l. praeiudicium. — **292**. ? cinxere. — **393**. l. ceu taxus; cf. De Vit. — **294**. Cf. **290**. — **295**. Cf. Serv. Aen. III. 64 and 680. l. cyparissus: cupressus. — **296**. l. cytisum. — **301**. l. cicatricem. — **302**. l. CHILIARCHUS. Tribunus qui mille contribulibus praeest; cf. Epin. 6 E 25, *ciliarchus qui mille praeest*, and Ball. *ciliarchus qui mille praeest hominibus*. — **303**. l. cycni: poetae. — **305**. Cf. Isidor. Or. XV. 2, 1. — **306**. The lemma (probably *cieo*) corresponding to *voco* has dropped out. — **307**. l. cicur. — **308**. l. mitigare; cf. Hild. C 81 n. — **310**. l. civica. — **312**. l. Cyllenius. — **314**. Cf. Loewe G. N. 151, "cod. Cassinensis 439[6] *circie: radia solis* (fort. *Circe . filia solis*, quamquam mira sane est triti vocabuli corruptela et parum congruit quod Ambros B 31 sup. *circiae radius solis* exhibet; *radii* Vat. 1468[1]); cf. Verg. Aen. VII. 10, *Circaeae raduntur litora terrae*, and 19, where Servius says, *Circe autem ideo solis fingitur filia*. — **316**. See above, p. **132**. — **320**. l. Chimaera. — **321**. l. gyrus; so **326**. — **323**. l. citrarius(?): pomarius, i. e. fruit-seller. — **324**. Cf. Hild. C 96 n., who reads *civitas*, but Mai aptly compares the Ital. *civita vecchia*, etc. — **325**. l. senator. — **327**. Cf. above, p. **134**. — **329**. l. huc ad nos. — **330**. l. CERCOPITHECUS simile simiae. — **331**. l. quiritat; cf. Prod. 316 f. Nonius 21, 18, and Varro L. L. VI. 68; cf. Donatus Ter. Ad. 2, 1, 1, veteres *quiritari* dicebant, *Quirites conclamare*. — **332**. l. cynici . . . vitam; cf. Cic. Orator 3, 17. The next gloss, perhaps, ought to be joined with this. Cf. Isid. Or. VIII. 6, 14, . . . *Unde et a canibus, quorum vitam imitabantur etiam vocabulum nomenque traxerunt*. — **334**. l. cidaris for *pallius* masc.; see Appel p. 92, l. bysso . . . nostri tiaram. — **339**. l. cothurnum. — **341**. Cf. above, **90**. — **342**. l. cohibet. — **344**. l. coacervat. — **345**. l. punit. — **346**. l. affines; cf. Isidor. Or. IX. 6, 2. — **347**. l. congiarium. — **352**. l. ambulavit. — **353**. l. commixtio. — **361**. l. coerceo. — **362**. l. cors, for which *chors* is later orthography; cf. Nonius 83, 14, "*chortes* sunt villarum intra maceriam spatia," and Varro L. L. V. 16. — **362**. l. nutritur. — **364**. l. c(h)ors. See Beck, p. 47, Inter *cors* et *chors: cortes* sunt *rusticorum, chortes militum castra*. — **365**. Cf. Prod. 277, Plaut. Trin. 743, *Columem te sistero*. — **369**. l. collega: socius. — **370**. l. colaphizat . . . caedit. — **373**. Cf. Nonius 55, 18, *Culinam* (*colinam*) veteres *coquinam* dixerunt, quoting Plaut. Most. 1. — **374**. = catax; see **34**. — **375**. l. virga quae per cochleam volvitur. — **379**. Perhaps a confusion of two glosses, compar: consimilis and compos: magnanimis,

used by Tertullian (sanus-animi?). — **380.** l. participem, similem; cf. **379**; cf. Non. 456 20, *Compotem* in bonam partem solum accipi putatur, quum et in mala positum sit, Plautus Epidico (IV. 1, 32) . . . Naevius Danae. eam nunc scis inventam probri compotem. — **382.** See above, p. **133.** — **385.** l. commoratio; cf. Cic. ad Fam. VI. 19, et villa et amoenitas illa *commorationis*, non diversorii. — **389.** l. cumulatius. — **390.** Cf. Plac. 22, 16, *comesationes*, convivia et scribimus uno *m* et uno *s*; Hild. C 171 n. *comersatio* luxuria vel *convivia meretricorum* est. l. convivia meretricum. — **391.** compos mentis is for compos voti. Plac. L. G. 14, 22, *compos cuius completum est desiderium.* — **391.** (The reading *iuxta* is not certain on account of erasures in the MS. Kaegi). Cf. Hild. C 301 n. and Serv. Georg. I. 104, *Veteres enim non in tempore, sed in loco comminus ponebant, i. e. iuxta.* — **393.** = **403.** — **394.** l. commercium. — **395.** *recrastinare* is used by Pliny and Columella. *recrastinatio* is cited by De Vit Lex. from Hilarius Libell. 5, and from other glossaries. — **401.** Cf. Prod. 327, *comesurus: manducaturus.* Lucilius quoted by Nonius 479, 2, uses *commanducatur* and *comest* in the same verse. Whether an active verb *comesare* existed may be doubted. There may be some confusion with *comisor, comessor.* — **402.** Cf. Paul. 41, 1, *compernes* nominantur homines genibus plus iusto coniunctis, "Nonius 25, 25, *compernes* dicitur longis pedibus." l. calcibus, and cf. *calcitrones.* — **403.** Cf. COMESTIO (De Vit). — **405.** l. commode. — **406.** l. commodius: utilius. — **407.** Perhaps a confusion of two glosses commentum: adinventio (cf. **424**) and commentarium: expositio. — **408.** l. commenticias: adinventicias, which is not given by Lex. — **409.** l. comites itineris id est oratio et gratia? — **411.** Perhaps *comitia* is the reading of the MS. (Kaegi notes 'der Streich für *m* fast unsichtbar'). l. comitia . . . honorum; cf. Hild. C 172, n. for other similar glosses. — **412.** l. comitium. — **413.** l. compita . . . quadrivia. — **416.** The letters are very indistinct, but the gloss evidently = **434.** — **418.** l. commenta. — **424.** Cf. **407.** l. commentatio? (but commune mendacium may be an attempt at an etymology; cf. **418** and **421.** *commentum* in the sense of *commentarium* is shown by Paucker to have been used already by Columella VII. 5, 17, "Bolus Mendesius, cuius *commenta* quae appellantur Graece, ἐπομνήματα." — **425.** — Hild. C 314 n. cites and defends *conpertitor: amicus*, but there seems to be a direct reference to Cic. de Offic. 1, 12, Dum *civi* aliter contendimus, si est *inimicus*, aliter si *competitor.* — **430.** l. complodere; so Bod. — **431.** l. honos = dignitas; for the various titles into which *comes* enters see Forcellini De Vit Lex. — **432.** Diomedes (K. I. p. 488 f.) gives a great variety of derivations for *comoedia*, which it is unnecessary to state here. Among them "ab urbana κώμῃ καὶ ᾠδῇ *comoedia* dicta est," and 'sunt qui velint Epicharmum in *Co* . . . hoc carmen frequentasse, et sic a *Co* comoediam dici." Our gloss is probably very much abridged from a fuller one. In the MS. *co* is written above *cer* I think as correction. Without much change we may read comoedia: significatio morum singulorum a come et ode tracta ē (vel) quia fit in Co. — **433.** Cf. COMMULCO. — **434.** l. consecrat; for a tendency to insert *r* in the neighborhood of another *r* see examples cited by Seelmann Aussprache des Latein p. 330, *draucus, frustrum, cretariae, Euphrates, Marcrinius.* — **437.** l. compascere. — **438.** l. confertum; cf. CONFERTUS. — **440.** confecit(?). — **441.** l. coniectio; cf. Bod. *coniectio, coniectura, aestimatio, arbitrium*, but *conitio* = *conicio* may originally have belonged to a previous gloss; cf. Bod. *conicio, arbitror aestimo reor, opinor*, and Hild. C 278 n. — **445.** l. iudicium synodale. — **446.** l. coniecit. — **447.** Cf. Bod. *contritio: mota.* Ellis conjectures *mola.* Cf. PLAGA in its ecclesiastical use. — **448.** Cf. CONSITUM = consertum in Claudian, Cons. Honor VI. 48. — **452.** l. coniectio; cf. **441.** — **455.** l. congestio. — **456.** l. CONNEXE. — **457.** l. coniventia. — **458.** l. tribu. — **460.** l. contiguus. — **462.** l. contionatur: adloquitur. — **463.** consulit: consilium. — **465.** Cf. CONDENSUM and De Vit. — **467.** l. commixtum, coagulatum. — **468.** l. conubia. — **469.** *confertum* should not be changed to *consertum.* — **477.** l. concitus. — **479.** l. conciliat. — **480.** l. conlibescit; cf. Sittl De Linguae Latinae verbis incohativis Archiv. I. p. 471. — **481.** Cf. CONDIARIUM and Loewe G. N. 152. — **482.** l. consuefacit. — **485.** l. coniventibus. — **490.** l. habitus. — **491.** l. contabescit. — **493.** l. controversia. — **494.** l. concinunt . . . a cantando; cf. Plac. 22, 10. — **495.** l. concinunt. — **496.** Cf. Prod. 14 f. where *conivoli: concordes, coniuncti* is compared with Paul. 42, 1, *Conivoli oculi sunt in angustum coacti coniventibus palpebris.* — **501.** l. conlustrans refers to Verg. Aen. III. 651. — **502.** For *cubiculus* m. cf. Appel. p. 85. — **503.** l. colluvionem: collectionem. — **504.** l. adiungere; cf. Plac. 20,

20, *conclassare, classem iungere.* — **507.** l. collybum; cf. COLLYBUS. — **509.** l. coniungar or componar? — **512.** l. concors: consentaneus; cf. **515** and Hild. C 346. — **514.** l. transacta. — **516.** l. ceteris, the form is interesting; cf. *peiero, periero, deiero.* — **521.** Cf. CONTINUO, where De Vit speaks of medical use for *purdurare.* l. perdurat(ur) congregatur. The I = J stands phonetically for *di.* — **525.** l. in unum volumen condensati. — **527.** l. conserimus. — **528.** l. congiarium quod in populum erogatur. — **529.** l. contiguus. — **534.** l. debilia. — **536.** l. convexa; cf. Paul. 58, 18, *Convexum est ex omni parte declinatum, qualis est natura coeli, quod ex omni parte ad terram versus declinatum est.* — **541.** l. conlineati. — **542.** l. contractus: cautio, pactum. — **543.** Cf. Nonius 38, 11, *Conviviones, compotores, a bibendo dicti,* Lucilius lib. XXVI. Quandoquidem repperi magnis combibonum ex copiis; cf. Prod. 320. — **545.** l. lucrum. — **546.** *com* is given in MS. with the usual abbreviation for *con,* l. quom or quo; cf. Isid. Or. V. 31, 8, Conticinium est, quando omnia silent. — **548.** l. consummat (for one *m* in Inscr. see Forcellini De Vit), finit. — **549.** Cf. De Vit. l. confertum. — **552.** l. consuetudo; cf. Prod. 257 and Plaut. Amph. I. 2, 28; cf. CONIECTUS and Ter. And. 4, 1, 44. — **560.** Hildebrand C 333 emends to *confercire,* but I think it a case of dittography. Compare such expressions as *conserere verba* and *conferre verba.* But possibly as we find vulgar forms like *feris, proferis, sufferit,* etc. (Rönsch p. 286) a vulgar infinitive *conferere* may have existed formed like *conserere.* — **564.** l. collybum: κερμάτιον, as in Gloss. Isid., so emended by Hild. C 294 n.; cf. **507.** — **567.** l. contactus; cf. Hild. C 373 n. — **568.** *concertari* occurs in Vulgate; see Lex. — **570.** Cf. Verg. Aen. I. 310. — **571.** l. conspicantur. — **574.** l. cognitor. — **575.** l. commanipularis; *mp* for *mm* seems somewhat analogous to the Romance forms *cambera, stombaco, cocombaro* (*mb* for *m*) mentioned by Schuchardt III. p. 96. — **579.** l. chronos. — **582.** Cf. Hild. C 449. — **583.** l. corylos; cf. Macrob. III. 18, 5, *Nux abellana . . .* ex arbore est quae dicitur *corylus;* Serv. Georg. II. 65, Sane *coryli* proprie dicuntur. Nam *avellanae ab Avellano* Campaniae oppido, etc. — **585.** Refers of course to the well known metaphorical use of horn common also in Hebrew. — **588.** Bod. *cossam: divinans.* Amplon. 288, 165, *cossam: divinam.* Loewe Prod. 342 proposes *cossens* = *consens: divinans,* but the word is Hebrew. Cf. *Cosam,* which De Vit Onomasticon derives from Hebrew kasàm h. e. *divinavit ut divinantem significet.* — **589.** l. cothurnum: calciamentum. — **590.** l. coruscum; cf. Serv. Aen. I. 164, 'silvarum *coruscarum* id est *crispantium.*' — **591.** l. corymbata; cf. De Vit and CORYMBUS. — **592.** l. splendor. — **593.** l. infamat, vituperat. — **595.** Notice use of the pl. *infantiis.* — **596.** l. cortina. — **598.** l. with Amplon. 290, 304, *curio: qui pronuntiat populo.* — **600.** l. cuneus (or concursus?): densus populus, turma hominum. — **603.** l. culex. De Vit gives only one example of *zinzala* from Cassiod. Psalm. 104 v. 31, *Ciniphes,* genus est *culicum* fixis aculeis permolestum, quas vulgus consuevit vocare *zinzalas;* but the vulgar name has survived in It. *zanzara* and Sp. *zenzalo.* — **605.** l. cuditur; cf. Paul. 62, 5, *cudere a caedendo dictum.* — **607.** l. scalpere or sculpere, perhaps a confusion of two glosses culere = colere: studiose agere, facere, and cudere: scalpere. — **608.** l. curulis sella. — **609.** l. cultus. — **611.** l. hastae. — **613.** l. cymba or cumba; cf. Saalfeld Tensaurus. — **614.** Cf. Serv. Georg. I. 321, *culmus est ipse calamus.* — **615.** Cf. Verg. Aen. III. 564, tollimur in caelum curvato gurgite, where Servius *Gurgite* pro *fluctu.* l. erecto fluctu. — **616.** l. cursim. — **617** and **619.** I do not know how to explain *gilionibus* and *gillone.* — **622.** culeus is written on the margin by second hand. l. culeus . . . ex sparto in modum aeronis quae liniebatur . . . homicidae . . . serpente . . . insuti mittebantur . . . mare . . . inter se qui odisse se dicuntur abinvicem, homo maioribus poenis afficiebatur; cf. De Vit and CULEUS.

D.

1 and **2.** Cf. glosses cited by Hild. D 8n. and DANUS = Gk. δάνος. I think it may still be doubted whether *danus* was used for *danista* = δανειστής. The original gloss may have been *danos: fenus* id quod *feneratur. danista: fenerator*; cf. Festus 68, 14, *danistae feneratores.* — **5.** l. DRACONTIA. — **6.** l. senex. — **7.** l. a dapibus; cf. Hild. D 10 f. — **9.** l. dammae; capreae; cf. **12** and Verg. Georg. III. 539. — **11.** l. Dabir: oraculum: cf. De Vit, where the Hebrew word *Dabár* is said to signify *oraculum Dei.* — **12.**

Cf. Amplon. 295, 10. *Dammam, genus ferae capreo similis.* — **13.** l. decalogum: decem verba legis. verba = λόγος; cf. De Vit, *Decalogia: decem praecepta domini.* — **16.** l. delibo; cf. Loewe G. N. 113. — **17.** l. lavit. — **18.** l. unctus; cf. Plac. 34, 2 and 6. — **22.** Cf. Paul. 73, 10. *Deliquum apud Plautum significat minus* (cf. Cas. II. 2, 33); but here we should read *deliquium;* cf. Paul. 73, 9; but especially Serv. Aen. IV. 390, "Gellius Annalium *deliquium* solis et *delicionem* dicit quod Vergilius *defectus* solis." — **24.** confusion of two glosses. Delenitus: depacatus, and delibutus (delivutus) or delitus: unctus. *Depacare* is not given by Lexx. Hild. D 98 gives *deliniti, placati;* so that perhaps we should read *deplacatus.* — **25.** Cf. Loewe G. N. 150. — **25.** l. dilata: in longum. — **29.** Perhaps for debellata: expugnata (cf. Ovid Met. IV. 604 and Hor. Od. I. 18, 8), although of course *debella* might be imperative. See also *Debellum* (= *Duellum*) *bellum vel pugna,* cited by De Vit. — **30.** l. dilabunt(ur?), for an active form of this verb I have found no evidence; but compare *labascit,* and Bod. *delabere, deficere, delabunt, deficiunt.* — **31** = **22.** 35 (*e* in rasura, *i* above line). l. deliberat. — **37.** l. dehiscens . . . ianuas; cf. Verg. Aen. VI. 52. — **42.** l. destinatio. — **43.** l. destinata. — **44.** Cf. Bod. defeneravit: ditavit and Prod. 380. — **45.** l. devinctissimum. — **48.** Cf. Prod. 375 and 381, and Sittl. Archiv, I. p. 527. **50.** Cf. DECENTARIUS and DICENTARIUS. — **51.** l. deterrimium; cf. Serv. Georg. IV. 89. *pelor a malo dicitur, deterior a meliore.* — **57.** l. dediticius . . . provincia . . . aliam tradit; but perhaps *daticius;* cf. Prod. 380. — **58.** l. inclinatus. — **59.** Cf. DEFLO; for active *dedigno* see Harpers' and Georges. — **60.** l, detegit; cf. **104.** — **63.** l. subiectus. — **64.** Cf. Paul. 70, 5, *dedita, intelligitur valde data.* — **66.** Cf. Paul. 71, 8, *devitare: valde vitare;* but here I think *devio* should be read. — **68.** l. dependendi. — **71.**? I am doubtful whether the MS. reads deo or seo; cf. Paul 65, 11, *depeculatus* a *pecore* dicitur. Qui enim *populum fraudat, peculatus poena tenetur.* — **72.** l. senex; the e above the line by second hand. — **73.** l. obstipuit. — **74.** l. luget. — **75.** l. dimicat. — **79.** Neither *dementicus* (*dementicius?*) nor *amenticus* are given by Lexx. — **82.** l. ligatus. — **83.** l. defessus. — **84.** l. vellicare. — **87.** l. detrahens, vituperans. — **88.** l. detractat (detrectat) valde tractat; cf. Hild. D 175 n., and Fronto ad. M. Caes. 3, 8; Paulus 74, 2. *detrectare est male tractare.* — **91.** l. defluunt. — **92.** l. depascit . . . degustat. — **93.** Ellis compares Ball, *defleta: plorata;* and suggests also very ingeniously, reading *desperata,* that *defleta* may be the negative of *fretus.* But compare the following glosses which I owe to him: Ball. *defretum quod defrudatur et quasi fraudem patiatur;* Ball. *defretum dictum eo quod coquendo arescat;* Bod. *defretum saepae passum.* De Vit gives *Defreta: desperata.* Gloss. ad. Att. Polypt. p. 58. Mai. *Defrictum vinum, vocatur, sapa ut in libro antiquo.* Gloss. MS. and Hild. D 61, *defretum, sapa, passum.* Although *defruta* (cf. Verg. Georg. IV. 269) was doubtless the earlier orthography, derived by Vaniček from *defruere* = *defervere,* yet the later spelling seems to have been *defreta* after the popular etymology, from *deferveo* (cf. Georges' Lex.). So Porphy. Hor. Carm. I. 14, 19, *freta dicuntur quod semper ferveant.* Nonius, 552, 18, quotes Varro, "*Sapam* appellabant quod de musto ad mediam partem decoxerant; *defrutum* (*defretum,* Codd.) si ex duabus partibus ad tertiam redegerant *defervefaciendo.*" Possibly, therefore, we ought to read *de sa*(*pa*) *parata* for disperata. But what seems to me a more probable emendation is suggested by a note which I find in Lion's edition of Servius, Georg. IV. 269, 270, "Burm. *Defruta, vina decocta et defraudata proprio sapore.*" *Desaporata* (cf. SAPORATUS) may have been used for *defraudata sapore* (compare the earlier use of *deargentare*), and would easily be corrupted into *desiperata, disperata* (see 185 disipet); but Ellis's explanation is much simpler. — **96.** Cf. De Vit, *Deplendere: de pleno deducere,* and Hild. D 120, l. deplere: de pleno *ducere* (or *deducere.* Hild. emends to *reducere*). — **97.** l. manifesta; cf. Ball, *depalata: manifesta;* cf. Prod. 44. — **98.** Perhaps for duellio; cf. Prod. 384, but possibly an independent word, standing in the same relation to *debellare* as *duellio* to *duellare bellare.* — **99.** l. pigritia. — **101.** cf. DENUS. — **103.** Cf. Bod. *degeneris generi suo dissimilis.* — **107.** l. gluttit. — **108.** l. delevit; *tollit* must be perfect here (unless due to confusion with **102**); cf. *tollisse,* Dig. XLVI. 4, 13, 4, and perhaps in Persius, 4. 2, where the editors say the present is used for perf. — **110.** l. decidit: cecidit; cf. Verg. Aen. V. 517. — **113.** l. denudat. — **116.** l. deicit. — **118.** cf. DIGLADIOR. — **119.** l. defunctorium; cf. Plac. 34, 3. — **120** refers to Vulgate use of *derivare* =

disperse. — **121.** l. demetam: praecidam. — **122.** l. divellit; cf. Hor. Ep. I. 10, 18, *divellit somnos cura*, where Acron compares Georg. III. 530, *nec somnos abrumpet.* — **124.** l. conligavit. — **127.** Cf. Plac. 35, 9, *depudescentem: impudentem.* — **128.** l. desaevit . . . ab; cf. Verg. Aen. X. 569, *sic toto Aenea desaevit*, etc., where Servius *autem hic valde saevit, alias saevire desinit*; see also Lucan V. 303. — **129.** l. valde. — **130.** l. non decet; so Plac. 33, 7. — **131.** Cf. DEDECORUS. — **132.** Cf. Bod. *delictus depulsus vel veruclatus* quod dicitur (the first part of which Loewe G. N. 115 shows to be for *delicus: depulsus*); Phill. *delictus verrucatus*, l. delectus(?): verruculatus (so Papias); cf. Columella, 7, 6, 2, Caper cui sub maxillis *binae verruculae* collo dependent optimus habetur; cf. Palladius Nov. 13, 7, Sed caper *eligendus*, cui sub maxillis duae videntur pendere *verruculae*, etc. Loewe l. c. errs in emending *verruclatus* to *vernula* or *vernacellus.* — **133.** l. defaecatum. — **134.** Cf. DELUBRUM, Hild. D 104 n., Serv. Aen. II. 225, and IV. 56. l. in ingressu . . . aquae . . . a deluendo id est lavando, probably an abbreviation of a much longer gloss. — **135.** l. dimissus. — **137.** l. foedae formae. — **139.** l. dehiscit: aperit. — **140.** See above, p. 138. — **142.** l. depravatum. — **143.** Bod. *depsaces genus serpentum;* cf. Hild. D 262, perhaps the plural form was glossed here; cf. Luc. IX. 610, l. dipsades. — **144.** l. ignavus. — **145.** l. divulgat: publicat. — **147.** Cf. EVACUARE. — **150.** l. deierat. — **151.** Is *despirat* corrupt orthography for *desperat*, and has the form influenced the etymology, or shall we keep **de-spirat?* — **153.** l. decuncem: decem unciarum; cf. Hild. D 193, *Deuncem, decem uncias.* Buecheler Archiv. I. 108, quotes Agroecius (Keil VII. p. 110) *deuncem decem uncias dicimus, diuncem, undecim*, and shows that *deunx* was in regular use for *decunx* before 450. In Pers. V. 149, he thinks *deunces* is for *decunces.* — **154.** l. defetiscit: defricat; cf. De Vit under *Defatisco.* — **156.** l. delibat: praecerpit (cf. PRAECERPTUS) degustat. — **158.** Cf. Bod. *defrutet. qui minuit quod frugi debuerat.* Perhaps *defruit* is to be kept despite this gloss and De Vit *defrudat, defraudat vel minuit;* cf. DEFRUO and DEFRUTUM. — **160.** *cessat* is also used for departing from the right way; cf. Lexx. — **161.** Probably for destitutus, cf. **164**; yet *desistere* is used in active sense. Apul. Met. 4. — **165.** *despicatis*, from *spica*, is confirmed by Bod. *despicatur, decolatur.* Ellis suggests = 'strained off,' and so cleared, but compare De Vit *Dispecatis: decoriatis*, Gloss. Isid. Ball. *despicatus: apertus.* Du Cange gives *despicare, E spica educere, separare.* — **167.** l. with Bod. deciduum quod cito decidit. — **168.** l. delationes. — **172.** Cf. above, p. 133. — **173.** l. despectus: contemptus. This enigmatical gloss is explained by Ball. *Dina media potestas herbarum vis et possibilitas* nam in herbarum cura vis ipsa *dinamis* dicitur, unde et *dinamedia nuncupatur* ubi eorum medicine scribuntur; cf. De Vit under Dynamidia, and in Lex. DYNAMIA. — **175.** Perhaps for delatus: advectus or? adductus. — **177.** Cf. Isidor. Or. I. 63, 1, *Ephemeris* namque appellatur *unius diei gestio.* Hoc apud nos *Diarium* vocatur. *Diarium* would therefore be the more correct reading. For the plural cf. Hild. D 201, *diaria: cotidiana salaria* and *Diaria: cibus unius dici.* — **180.** l. diiudicat. — **181.** l. destinat. — **183.** l. diffisus. — **185.** l. desidem. — **186.** l. desipit: sapere desinit. — **191.** l. diluculum. — **193.** Cf. De Vit *derivatorium, castellum ex quo aquae in diversas urbis partes derivantur*, and under *diribitarium*, and *divisitorium.* Ball. *dirivatorium: locus contubernii.* l. *diribitorium*; cf. De Vit and Hild. D 269 n. contubernii emended by Oehler to Campi Martii has not yet been explained. — **199.** l. deformis, from DIFORMIS to DIERMIS, only the dropping out of the O is neccessary; cf. Loewe G. N. 151, "Num [as] chemus: turpis?" which seems to me highly improbable; cf. Mon. 6210. *deformem: turpem fedum*, and Beck p. 12, "inter *deforme* et *turpe*, *deforme* ad corpus refertur, *turpe* ad animum." — **202.** l. despectabilis (not given by Lex. = *despicabilis*) contemptibilis, which occurs in Donatus Phorm. 2, 3, 75, and elsewhere. — **205.** l. desistet. — **209.** l. disceptatur: litigat(ur). — **210.** Cf. DISCIPULOR. — **211.** l. diluvium. — **213.** l. non consentiens. — **214.** l. discretum. — **215.** l. diffugatum. — **216.** Cf. **199.** — **217.** l. demolire. — **218.** Cf. **143.** — **221.** Cf. Hierony. Ep. 28, ad Marcellum. Quidam *diapsalma* commutationem metri docuerunt esse, alii *pausationem spiritus.* l. pausatio. — **222.** l. consecratio. **223.** l. dissidet. — **226.** Cf. dyspnoea and dyspnoicus, here the adj. has taken place of noun. — **227.** Cf. Prod. 6 and 325, Mai. VI. 521, *Discerniculum ornamentum kapitis virginis.* Amplon. 296, 73, *Discerniculum, ornamentum capitis virginalis ex auro*, found in Lucilius XXX. 58, and Varro L. L. V. 129. Also called *discriminalis acus* by

Jerome; cf. Isid. Or. XIX. 31, 8, *Discriminalis capitis mulierum sunt vocata ex eo, quod caput auro discernant.* — **228.** l. ordinat. — **229.** l. derivat. — **231.** Cf. **265.** l. not digeritur, or disgregatur, but disicitur. Probably *disicitur* was written *diiecitur*, hence *diiegitur* and then *digegitur; g* for *i* as in *degerat*, **150.** — **233.** l. dirimere. — **234.** l. partitur. — **236.** l. *dissertationes*, or perhaps *discertationes;* cf. Georges s. v. — **241.** Cf. Nonius 287, 9, *distrahere est vendere.* — **242.** l. deuncem; cf. note on **153.** — **243.** l. dyscolus; cf. Loewe G. N. 107. — **244.** Cf. DISPERNO. — **245.** l. descriptio: dispositio vel sub licentia an abbreviation I think of a longer gloss; cf. Servius Aen. I. 159, *est in secessu topothesia est, id est fictus secundum poeticam licentiam locus . . . nam topographia est rei vera descriptio*, but Aen. I. 142, he says *sub poetica licentia*, for secundum p. l. — **246.** l. virgis. cf. Ars Am. 2, 209, *distenta suis umbracula virgis.* — **250.** Cf. **140.** — **258.** l. dives opum refers to Verg. Aen. I. 14. — **259.** l. deversorium. — **260.** Cf. Serv. Aen. I. 142, *Dicto citius . . . citius quam dici potest*, so emend. — **262.** l. dissimiles; cf. **268.** — **264.** l. cottidianus. — **265.** Two glosses confused, dissicere = disicere: dissipare and dissecare: in diversa secare. — **266.** l. deriguit (cf. Verg. Aen. III. 259) rigidus . . . frigidus, perhaps *factus* is omitted. — **269.** l. dissidentes. — **270.** *Dispicatus* must be kept I think; cf. *spicatae faces*, which De Vit explains, *ligna multi fida:* h. e. *in usum facum in tenues particulas aristarum modo dissecta.* — **271.** l. ditior: divitior. *doctus* is perhaps the beginning of another gloss. — **273.** l. dissensio. — **275.** l. dictitat. — **276.** l. in longum. — **280.** For capreus see Priscian (K. I. 113). — **283.** l. ascia lapidaria, dolabra; cf. Hild. D 376. — **284.** Cf. Hild. D 378 n. — **285.** Cf. Bod. *dolopes milites vel duces grecorum*, Ball. *dolopes, pyrri milites.* Serv. Aen. VII. 664, *dolones, dolo* est aut flagellum intra cuius virgam latet pugio, aut secundum Varronem *ingens contus cum ferro brevissimo.* There is evidently some confusion with previous gloss. Perhaps Dolones: conti lati per manus; Dolopes: milites pyrrhi. Kaegi notes a *rasura* above the *n* of *fini.* — **286.** l. Donusa; the MS. has *e*, but the alphabetical order requires *o.* — **288.** l. Maeniana; cf. Festus 134, *Maeniana* appellata sunt a *Maenio* censore, qui primus in Foro ultra columnas tigna proiecit, *quo ampliarentur superiora spectacula.* Amplon. *superiores domus;* cf. De Vit. — **290.** dumtaxant may have been in vulgar use. — **294.** Cf. DUELLIUM. — **298.** The abbreviation before VIII. I do not understand, but the VIII. may be due to some such grammatical gloss as we find Mai. VIII. 64 (Thesaurus), bellum componitur hoc duellum, li et duellium lii ·i· duorum bellum unde hic duellator · ris ·i· ille qui duellum peregit, etc. — **299.** Cf. Hild. D 394 n. — **300.** Cf. Plac. 76, 21, *duellum enim* dicitur quasi *duorum bellum.*

E.

1. l. evangelium, — **2.** l. edacitas, rasura in MS. = **7.** — **3.** comissatum for comissatur (tor); cf. Porphyr. Hor. Sat. 2, 1, 92, *edax; vorax, gluto.* — **4.** l. edacitas. — **6.** l. ? futuri or praetoris decisio. — **7.** Cf. Bod. etacitas *multae commestiones*, and Hild. E 10, l. edacitas: multitudo commestionis. — **10.** l. edentat. — **11.** l. effatur. — **13.** l. effertur, or ecfertur, funus ducitur. — **14.** Cf. Loewe G. N. 151, "*effica: adaperire* (*effeta* glossae 'asbestos' quod non dubito quin verum sit, cum in interpretamento latere videatur *pariendi* vocabulum)," but Hildebrand E 31 n. had already recognized in *effeta* the Hebrew *epheta*, which Du Cange explains by *adaperire.* — **15.** l. ephemeris: cotidiana. — **17.** Cf. EFVEMINO. — **20.** l. efferebamur: superbiebamus. — **24.** Cf. above, **14**, Loewe G. N. 151, conjectures effecanda: despumanda. — **28.** l. ephebi, adulescentes. — **29.** l. imberbis. — **31.** Cf. Mai. VI. 522, *egerate execrate*, and Phill. *egerare: spernere, detestari, execrare* read therefore eierate: execrate, or perhaps eierare: execrare. — **32.** l. foras. — **33.** l. aegre. — **34.** Cf. **36.** — **35.** l. aeger, truncated gloss. — **38.** l. elabi. — **39.** l. helleborum; cf. De Vit under Sitri, "*Sitri* pro *veratro* Anthim ep. ad Theud. 25. *Elleborum* herbam, quae latine dicitur *veratrum.* Monet Rose ad h. l. in cod. aliquo haberi. quem latini dicuntur *sitri.*" — **40.** See above, p. 134. — **42.** l. Elissaei: Carthaginienses. For ilisica perhaps Elissa is to be read with reference to Dido; cf. Serv. Aen. I. 340, Dido vero nomine *Elissa ante dicta est.* — **43.** l. elicere. — **46.** l. elevigata. — **47.** l. Elysios: beatos nuncupabant. — **52.** l. eluvies: liquor quidam de quo aliquid eluitur; cf. Hild. E 85. — **53.** l. cuiuslibet rei; cf.

Hild. E 78. — **55**. l. trahens. — **56**. Cf. excudit, Verg. Aen. I. 174, and Hild. E 7. — **57**. l. tormenti. — **61** and **63**. l. miles veteranus qui iam complevit militiam; cf. Bod. *Emeritus miles veteranus qui iam conplevit malitiam quia mere* (l. merere) *militare dicitur.* The latter part of **63** belongs to **61**, and is beneath it in the MS. — **64**. l. refulsit. — **66**. l. lucrum.— **67**. l. Eumenidum; cf. **169**. — **68**. l. exaltatum est. — **71**. Cf. Mai. VI. 522, *empyrius, locus super mare,* Bod. *emporium, locus supra mare.* Perhaps = empyrius: locus super aere, although in Bod. and in glosses cited by Hildebrand E 106 there is evident confusion with *emporium.* — **73**. Cf. De Vit, *Empaectae;* ἐμπαῖκται *derisores Deorum et religionis,* with which *emphaticum* has become confused. — **74**. l. empes vel empos; cf. IMPES and IMPOS, and Loewe G. N. 186 and 193. — **75**. l. eminulis; cf. Varro R. R. 2, 5, *genibus eminulis,* 2, 9, *dentibus paulo eminulis.* — **76**. l. ensitum = insitum. — **80**. Cf. ἐγκρυφίας ἄρτος. l. subcinericius; cf. Ps. Aug. Serm. 5, 1, 'fac *subcinericios* panes' (Genes. 18, 6) quod graece *encryphias* dicitur, *occultos* videlicet et absconditos indicans panes. — **84**. l. enodat. — **87**. ensicium = INSICIUM. — **90**. For enucleatim see Georges. — **92**. l. Aeolus. — **95**. l. epitoma; this form for *epitome* is used by Cicero ad Att. 12, 5, 3. — **96**. l. epitomarius (of which I have found no example in use) abbreviator. — **97**. l. epigramma; cf. Bod. *ephigramma: adbreviatio scripturarum vel superscriptio titulis.* — **98**. l. ephemeris: diurnum; the form *diurnis* seems due to the ending in *ephemeris.* — **99**. l. rationes. — **100**. l. epitaphium. — **101**. l. epithalamium. — **103**. l. epiphora. — **104**. Cf. SCRIPULA. — **105**. l. eous or eos: lux; cf. Plac. 37, 3, *Eous* est homo de oriente. *eos* aurora vel *lucifer.* Verg. Georg. I. 288, Aut cum sole novo terras inrorat *Eous.* — **106**. l. superinspector. — **107**. l. ebibit. — **109**. Cf. EPHOD and Isid. Or. XIX. 20, 5, l. superhumerale . . . casulae . . . . sacerdotes . . . gemmisque contextum quo soli pontifices utebantur. — **110**. l. epichiremata. — **112**. l. aequiperat, equidem may have got in from the preceding gloss, or stand for *equitem,* a mistaken etymology or possibly for *aequiter* = *aeque.* — **114**. Hild. E 152 n., cites *ergata: vicinus aut operator* and *ergata: vicinus. vicinus* I do not understand; may it not be for *oficinus* = **officinus* or **opificinus?* Compare these glosses given by De Vit, *Ergates;* ἐργάτης *operarius, opifex, opificium: ergasterium, oppificium*; gr. *ergastulum.* (A confusion with ἀγνιᾶτις is hardly possible.) — **115**. l. e regione: econtra; cf. ECONTRA. — **117**. l. Erinys. — **118**. l. aerumna; cf. **124**. — **119**. l. hermula. — **120**. l. ἐρυσίβη. Du Cange gives *Erisibe: erugo vel rubigo messium.* Here there seems to be a corruption of *erugo* (aerugo) *et rubigo messium.* — **122**. Cf. HERCISCO, probably refers to the phrase *familiae herciscundae.* — **125**. Cf. Hild. E 150, *ergastulis: auris* (= duris) *operibus.* — **126**. l. marmor; for fuller glosses see Prod. 147 and Plac. 37, 17. — **127**. l. essedum: vehiculum. — **128**. Cf. Prod. 403, where Loewe cites from Mai VI. 523a, *Estidram: quam veteres canapum nominarunt.* According to De Vit, Gloss. Pap. has *estrida;* Loewe thinks *excetra* is to be read. *Caput,* unless a corruption of *canapum, Canopum,* is very obscure. I can only compare Serv. Aen. VI. 287, Sed latine *excetra* dicitur, quod uno caeso tria *capita excrescebant,* and Hesychius σκύτη(?) κεφαλή. — **129**. l. esitat. — **130**. Cf. ESUS. — **131**. l. essedarius . . . vehiculi. — **132**. l. etesiae. — **137**. l. Tuscia. — **140**. Cf. eugenius and εὐγενής. — **141**. l. evomat; cf. Vulg. Levit. 18, 28. — **142**. l. nobilitas. — **143**. l. aevum; cf. **146**. — **151**. l. aeonas. — **154**. Cf. Ball. *eulogium: divinum responsum.* Ellis says that an oracular response in verse may be referred to; cf. Mai VIII. 193, *Eulogium, testimonium vel cantus. Marcianus: mixtis eulogium modis coaequans.* — **155**. ? Cf. εὐωχίας, l. delicias. — **157**. Cf. **160**, Paul. 77, *Evelatum eventilatum, unde velabra, quibus frumenta ventilantur.* Perhaps the meaning here assigned is influenced somewhat by **152**; *evulsit* from *evello, expoliavit;* but why should not *evelatus* be the opposite of *velatus?* like *exoneratus, enodatus;* otherwise it would be easy to emend to *enudantur.* — **162**. Cf. Gloss. Isid. *evadatur · reposcit, flagitat.* — **163**. Probably due to a misunderstanding of a passage like Catul. LXIV. 391, Thyadas effusis *evantes* crinibus egit. *evantes* is explained as if *evanentes: fugientes;* Cf. above, **153**, *evanuit: aufugit* and Gloss. Lat. Gr. *Evaneo:* ἀφανίζομαι. — **164**. l. e vestigio. — **165**. Cf. Amplon. 329, 49, *evitatus, perterritus vel occisus aut vita privatus,* of which this seems a corruption. — **169**. l. Eumenidum. — **170**. l. eucharistia. — **171**. = heus. — **172**. l. hostiarum. — **174**. l. exhalat. — **175**. Cf. Prod. 277, *exaedituat: excludit ab adytis.*

Loewe thinks exaedituat was read in Plaut. Trin. 1127. — **176.** l. exhaustis: evacuatis. — **177.** l. examussim; cf. Plac. 37, 13, *Examussim integre*, sine fraude, amussis enim dicitur regula vel mensura fabrilis. *ingredere* seems a corruption of *integre*. — **183.** Cf. EXOMOLOGESIS. The dictionaries give no other form. — **186.** l. execrat: abominat. — **188.** l. excubat. — **190.** Cf. INPROPERO, vulgar corruption of *improbro*. — **191.** l. ex(s)ors, hereditate. — **193.** l. exilit. — **194.** l. comestum. — **195.** l. interposito. — **197.** l. abstulit. — **198.** l. exuviae: spolia quae occiso hoste tolluntur. — **201.** l. sine consilio (alienus; cf. 258). Ellis suggests *agens*. — **202.** l. mortiferum, periculosum. — **206.** l. exoletus: dissolutus; cf. 280. — **207.** l. elevavit. — **212.** l. credulitas. — **214.** l. exserit (exerit; cf. 199). — **219.** Cf. Schol. Juvenal III. 175, *Exordium, exordiarius* apud veteres in fine ludorum intrabat, etc. Cf. Loewe G. N. 84, note. — **220.** l. nobilis eminens (prae) ceteris. — **221.** l. calamitas. — **224.** l. locus subselliorum, so Ball; cf. Plac. 39, 8, *exedra absis quaedam separata modicum quid aut a praetorio aut a palatio.* l. absida salutatoria; cf. De Vit. — **226.** explodita I have not found in use. — **227.** ? l. exorta: nascentia. — **231.** Cf. 214. — **233.** l. expilatores: alienae hereditatis, *subtractores* not in Lexx. — **234.** Cf. above, p. 131. — **235.** l. exaestuat. — **236.** See above, p. 133. — **237.** Cf. EXPERGIFICUS. — **239.** l. exsomnis (exomn.). — **240.** experimentandum is supported by EXPERIMENTATUS. — **243.** l. eicit; cf. Nonius 16, 1, *expectorare* est extra pectus *eiicere*. — **248.** l. expediat. — **249.** Neue recognizes an active form *experio*. — **250.** l. desideratum. — **253.** Perhaps *extruso* can be kept as freq. form. — **255.** See above, p. 125. — **257.** Cf. EXFRETO, found as yet in no author. — **259.** l. exagitat; but there may be a confusion of two glosses, as e. g. exacerbat: provocat, and examinat: explorat. — **260.** l. cognoscam. — **262.** Cf. EXIMIETAS. — **268.** l. perficit. — **272.** l. exempta. — **276.** l. ex(s)erere. — **278.** l. exilivit or exiluit. — **280.** l. exoletus; cf. 266. — **282.** = enormis, but the form EXORMIS seems to have existed. — **285.** Cf. EXCAVEO. — **286.** extestinum, not in Lexx., is formed after analogy of *intestinum*. — **287.** Cf. Paul. 80, 13, *exanclare: exhaurire.* — **288.** Cf. ECSTASIS. — **290.** exvito = evito; cf. De Vit, l. devito. — **291.** Cf. Nonius 63, 17, Fulguratores. Ut *extispices* et *haruspices*, ita hi fulgurum inspectores. — **292.** I think *exidium* = *exitium;* cf. Paul. 81, 6, *Exitium* antiqui ponebant pro *exitu;* nunc *exitium* pessimum *exitum* dicimus. Juvenal has preserved one of the formulas for divorce, Sat. VI. 146, "collige sarcinulas" dicet libertus, "et *exi*." Compare the expressions *domo egredi* and *vade foras*. See Brisson. De Formulis p. 723; cf. Seneca de Beneficiis III. 16, 2, Maritorum annos suos conputant et *exeunt* matrimonii causa, nubunt *repudii*. This special use of *exire* supports *exitium*, of which probably Verrius Flaccus gave an example in this sense; but see 303, excidium, where, however, *separatio* may be due to a confusion of the two glosses. — **293.** l. exsinuat; cf. Mai VI. 523, *exinuat, examplat, exaperit. exaperire* is very rare. De Vit cites Augustin. Conf. 2, 10, and Interp. Irenaei 2, Haeres. 19, 8. Paucker adds Aug. Cassiod. in ps. 36, 6, *fulgor Dei operum nostrorum qualitates exaperit. Examplat* (*-iat*? cf. *amplo* and *amplio*) would best suit the meaning here. — **294.** Cf. Nonius 10, 10, *Illex* et *exlex* est qui *sine lege* vivit. — **295.** l. exedendus. — **297.** l. ex(s)erte; cf. Plac. 39, 12. — **298.** l. sublatis, *conplicitis* might be for *completis;* cf. *exemptis diebus*, etc.; but see Bod. *exemptus sublatus, exclusus, explicitus*. — **300.** l. exhaurit. — **297.** Cf. **301.** — **302.** Cf. **195.** Bod. *exintervallo*. — **304.** Cf. EXPUNGO. — **306.** l. extentus; the *c* of *extinctus* was probably not heard, so that *extentus* and *extintus* would have much the same sound; cf. Nonius 47, 3, *Experrectum: extentum*. — **307.** l. ex(s)iliatus. — **308.** Cf. Isid. Or. X. 85, *extorris* quia *extra terram* suam est, quasi *exterris*. Sed proprie *extorris* cum vi expulsus sit, etc. — **309.** l. expertia. — **310.** *t* is deleted in MS. and *d* is written for *t*. I now see that the *um* of *extorsitum* (ũ MS.) is for vel, and that *propiam expulsus* is a repetition from 308, l. extudit tundendo extorsit vel exclusit (excussit?); cf. Hild. E 333, *extudit, extundendo extorsit*.

F.

1. l. favor . . laudis. — **2.** l. facetus; notice that in **4** we have *eloquens.* — **4.** l. habilis. — **5.** l. facetia. — **6.** l. facetiae: elegantia? — **11.** l. facetior. — **13.** perhaps fastus; cf. Paul. 87, 19, *Fasti enim dies festi.* — **14.** l. favet. — **16.** perhaps for *fastosus,* or originally the same gloss as Bod. *Fastus, superbiae contemptus.* — **19.** l. fascinat . . . decipit; cf. De Vit. — **20.** l. Phalanx; cf. Serv. Aen. XI. 92, *Phalanx: lingua Macedonum legio.* — **23.** l. phalerare. — **28.** l. FALSILOQUAX. — **30.** l. falarica. — **35.** Cf. Bod. *fescennina clausibiles vel vallationes.* De Vit, Lexicon, has **Fascemina clausibilis Vallatio circa claustra.* Gloss. Isid. n. 699, Fortasse leg. est, *fasceamina* ut sit a *fasceo* vel *fascio* unde *fasceamen;* both *clausibilis* and *vallatio* are rare words. There may be a reference to Verg. Aen. VII. 695, Hi *Fescenninas acies* Aequosque Faliscos, Hi Soractis habent arces Flaviniaque arva, where the use of *acies* has given the editors much trouble, Peerlkamp proposing *Fescenninos colles,* and Hoffman *Fescenninos agros.* Gossrau proposes *arces* for *acies.* — **36.** Cf. FAVISOR Georges, Loewe G. N. 173 ff. and Stowasser, Archiv I. 440. — **37.** Cf. Bod. *fascinus: aspectus,* and Amplon. 332, 25, *fascinus aspectus honerosus.* l. fascinus: aspectus onerosus = evil eye. — **40.** Cf. Bod. *faxo facio incendo.* l. fax: incendium. — **41.** l. faciam; cf. Ball, *faxo faciam futuri temporis.* — **42.** probably for *funereas;* cf. De Vit. — **44.** l. famedicus = famelicus; cf. Donat. Ter. Eun. II. 2, 29, A *fame* et *edendo* dictus est quasi *famedicus.* — **46.** Cf. Ball. *fana idolorum templa.* — **48.** ? Cf. De Vit under *famicus* and *flamminicus.* — **49.** l. canentes. — **51.** cf. FALCIDIA. — **52.** l. phaleras: adulatoria verba. — **53.** l. ferjendo (é in MS.); Serv. Aen. 1. 123, *fatiscunt, abundanter aperiuntur;* cf. Plac. 48, 4. — **54.** l. factiosus; cf. Bod. *factiosus falsus vel saepe faciens deceptor fallax.* (*fallaciosus* may have had some influence on this gloss, but it describes the character of a demagogue.) — **55.** Cf. HARIOLUS, l. vates. — **57.** Cf. onerosus in **37.** — **58.** l. Pharos. — **61.** l. fasti. — **62.** Cf. **36.** — **64.** Cf. **67,** and De Vit; probably corruptions of some case of *fasti* taken from a commentary; but *fastes* may be for *fasces.* — **65.** l. Pharisaei. — **69.** l. femina. — **70.** l. festivus: laetus; cf. Bod. *festivus, locosus compositus lozundus, vel urbanus comptus.* — **71.** l. femor..geniculum. — **72.** l. fastidium. — **74.** cf. Bod. *Fau nihil vel subito.* — **77.** ? Cf. De Vit s. v. — **78.** l. ventis siccis, so Bod.; cf. Val. Flac. 6, 665. — **80.** According to Kaegi *flagtium* in MS., Goetz *flagitium.* l. libitum. — **81.** Notice confusion with *fragrantia.* — **82.** l. flagrans; so Bod. — **84.** l. flammea; cf. FLAMMEUM. — **86.** Cf. FLAMONIUM. — **87.** l. rubeum. — **90.** So Bod.; cf. FLAMMEUS and FLAMMATUS. Bod. has also *flammoro irato.* — **92.** l. physemata. — **99.** l. flamen Martialis. — **100.** l. Quirinalis . . . Quirini. — **102.** l. copiosus. — **109.** Turpis belongs probably to another gloss, *foedus* (*fedus*): *turpis;* cf. **115** and **183,** or *fetidus: turpis.* — **113.** l. ferox . . saevus. — **114.** l. Phoenices. — **115.** l. foedant. — **118.** For other inchoatives with factitive meaning see Prod. 362, and G. N. 143, and Sittl. Archiv, 1, 496. Compare *efferascere.* — **122.** Bod. *ferire.* Although *feris* is found for *fers,* I am inclined to think *ferire* correct, and taken from some such passage as Plaut. Men. 177, *iam ferio foris?* M. *feri.* — **125.** De Vit cites from Hilarius in Psalm. 2, n. 20, Si fuerint delicta vestra ut *phoinicium,* where the Vulgate has *coccinum.* — **126.** ? Compare PROMUTUOR and Reichenauer Glossen, 454, *mutuo acceperam: inprūtatū habebā,* and 756, *mutuare: inprūtare.* Diez Altromanische Glossare p. 37. "Impruntare ist vielleicht das älteste Zeugniss für das fr. *emprunter* das im alten Provenzalischen noch nicht erscheint; entstanden durch Proclise aus *in-promutuum,* indem sich der Accent in Verbum *impromutuare* verschob und *u* vor der Flexion wie gewöhnlich, z. B. in *batuere,* verschwand." — **127.** Cf. Paul. 92, 2, *Femur femoris, et femen feminis,* and Neue Formenlehre, I. 558 f. Various emendations suggest themselves. — **129.** l. rem . . . fiducia(m), i. e. velut fiduciam. — **130.** l. fimum. — **132.** Cf. FISTULOR, and Prod. p. 386; Mart. Cap. 9, § 906, *fistula sibilatrix.* — **133.** l. ficata. — **134.** Cf. **138.** l. fidibus: chordae citharae; cf. Paul. 89, 16, *Fides* genus *citharae* dicta, quod tantum inter se *chordae* eius, quantum inter homines fides concordet; Nonius, 313, 25, *Fides chordae,* quoting Aen. VI. 120, where Servius, *Fidibusque canoris, bene sonantibus chordis.* — **135.** l. figulus. — **138.** Probably for fidicina: citharoeda; cf. Hild. F, 129. — **139.** l. PHILARGYRIA. — **140.** Cf. FIDICULAE; l. lamminae; see **147.** —

141. l. Phoebe; cf. Mon. 6210, *feba luna*, and Serv. Verg. Aen. X. 216, *Phoebe luna* sicut *sol* '*Phoebus*.' — **149.** Cf. Bod. *figmenta conpositiones adinventiones vel similitudo humana.* — **151.** Cf. Verg. Aen. VII. 566, medioque *fragosus* Dat sonitum . . . *torrens.* — **154.** l. fiduciam habens. — **157.** l. frivola; cf. Paul. 90, 6, *Frivola* sunt proprie *vasa fictilia quassa.* Unde dicta verba *frivola*, quae minus sunt fide subnixa. Cf. **164** and **165.** — **159.** l. hasta. — **164.** l. frivolus. — **166.** l. focillat: reficit. — **172.** l. fota. — **175.** Cf. Isid. Or. XV. 7, 4, *fores* dicuntur quae *foras*, valvae quae intus revolvuntur; Serv. Aen. I. 449, *fores* proprie dicuntur quae *foras aperiuntur.* — **176.** l. formido. — **179.** l. phosphorus. — **180** ? l. FORMIDINES; cf. Bod. *formidines pinae inligatae in quibus venatores cervos capiunt vel timores*, and Seneca de Ira, 2, 11, cum maximos ferarum greges *linea pinnis distincta* contineat et in *insidias agat.* — **184.** l. Phoebus. — **185.** l. phocas; cf. Verg. Geor. IV. 395. — **187.** Cf. Charisius, 94, 21, *Forfices* et *forcipes* et *forpices* quidam distingunt ut *forcipes* sint sarcinatorum a faciendo, *forcipes* fabrorum, quod *ferrum calidum capiant*, etc.; Bod. *forceps, fabri que corruptae forfices dicitur ulcus vel cancer;* Ball, *forceps, forpicis fabri*, eo quod fortiter teneant, et *forceps ulcus aut cancer.* — **187.** l. futilem. — **189.** l. fore: futurum esse. — **193.** Cf. FOLIATUS, and Loewe, G. N. 107, who proposes *coliatum: curtatum.* The order of the letters would suggest *fornicatus;* but why not keep *foliatus*, shaped like a leaf, as *falcatus*, sickle-shaped? — **194.** l. amicitiae pactum. — **195.** See **186.** *forceps* was used of the claw of the crab, hence perhaps *cancer*, of which *ulcus* is an explanation; so Hild. F 205. But perhaps *cancer* is a corruption of *carcer.* — **197.** l. timidus. — **198.** Cf. Serv. Aen. VI. 631, *fornice arcu.* Cicero videt ad ipsum *fornicem Fabianum;* l. arcum triumphalem (plateae?). — **199.** l. parsimonia. — **204.** For continens substantiae = rei familiaris. — **206.** Cf Ball, *frustra, sine causa inaniter;* Bod. *frustra, inaniter sine causa vel in vanum.* — **207.** l. fructurus. — **212.** l. vermiculus. — **215.** For an active form of *fungo*, see Neue II. 289. — **217.** l. foto; so Bod.; cf. Ball, *fotum molliter amplexum sive calefactum*, and Verg. Aen. I. 692, where Servius *fotum, sublatum, complexum.* — **218.** l. munit; cf. Verg. Aen. IV. 247, Atlantis duri, caelum qui vertice fulcit, where Servius *fulcit, hoc est sustinet.* — **219.** l. funebre; cf. Paul. 93, 1, *funebres tibiae dicuntur cum quibus in funere canitur*, etc. — **220.** l. sublevatus. — **223.** l. fulgor; cf. Mart. Cap. II. 151, vel sideris cursu, vel *fulminis iaculo;* for *iacula* fem. cf. Appel, p. 60. — **226.** Perhaps for *fulgurat*, as we have Not. Tiron. p. 118 *fulgerat: infulgerat*, or it may be a verb formed from *fulgetra;* for *preemit* perhaps *praemicat* is to be read (cf. Min. Fel. Octav. 5, *rutilare fulgura, fulmina praemicare*), or *praevenit* (=*praeaenit*, *u* for *a*, as frequently), which would be nearer the MS. reading, and the full gloss may have been fulgetra: quod fulmen praevenit, which would agree with Seneca, Q, N 2, 56, 1, Heraclitus existimat *fulgurationem* esse velut apud nos incipientium ignium conatus et primum flammam incertam modo intereuntem modo resurgentem. Haec antiqui *fulgetra* dicebant. Compare, however, Festus, 245, 22, Peremptalia, quae superiora fulgura ut † portenta peremunt, id est olunt †, and 214, 22, peremptalia fulgura Gracchus ait vocari quae superiora fulgura ut † portenta vi sua peremant, etc. — **227.** l. splendidum. — **228.** l. fumida. — **230.** l. rubra or rubea; cf. *fulvida: rubea* De Vit, and Bod. *fulvus: rufus, rubeus.* — **232.** Cf. Prod. 106 and De Vit; also in Bod. l. funda: rete; cf. Serv. Georg. I. 141, *funda, genus retis dictum a fundendo*, and Amplon. 333, 114, *Fundia: retia linea et fundibus.* — **235.** *f* is not in the MS., but torn off. — **237.** Cf. IMAGINARIUS; l. cadavere. — **239.** l. ministeria; but the spelling *misteria* is significant; cf. O. Fr. *mistier* — **240.** So Kaegi reads, but Goetz tribulatioũ; l. functio: tributorum exsolutio: cf. Forcellini, Lex. "Saepe in Cod. Justin. dicitur *functio tributorum pensitatio;*" and Bod. *Functio exsolutio tributorum vel possessio.* — **241.** l. terebras; cf. Georges. — **243.** l. solvimus. — **245.** Cf. *fundanus* and *fundarius* in Du Cange; l. fundos. — **248.** Cf. Verg. Aen. II. 407. — **249.** Cf. Paul. 84, 6, *Furvum nigrum vel atrum*, and Serv. Aen. II. 18, and Georg. III. 407.

G.

1. l. pilleum cf. Mai. VI. 525; *Galeram; palleum pastorale de iunco factum* where *pallium* is a corruption of *pilleum.* — 2. Cf. Isid. Or. VII. 5, 10, *Gabriel* Hebraice in linguam nostram convertitur *Fortitudo Dei.* — 3. Cf. Lagarde Onomastica Sacra, p. 58; Galilaea volubilis sive transmigratio facta. — 4. Cf. De Vit and CALAMAUCUS; Du Cange gives *Camelaucum* as the correct form. — 5. Propinator for popinator; cf. Isid. XV. 2, 42, *Propina* Graecus sermo est, qui apud nos corrupte *popina* dicitur. — 8. l. GABBARAE, a name for mummies, the origin of which is obscure. — 9. Also given by Mai. VI. 525, and placed by Loewe G. N. 165 among the new words. — 10. l. verbosa. — 12. Cf. above p. 137. — 13. l. GAZOPHYLACIUM: divitiarum et tensauri (thesauri) custodia. — 15. l. GASTRIMARGIA, so Bod. — 16. *Galbanus* occurs Vulg. Sir. IV. 21; cf. Serv. Georg. III. 415, *Galbanum species est multis apta medicaminibus;* cf. Bod. *Galbaneus genus medicamenti vel pigmentum album,* where there is confusion with *Galbineus.* — 17. γάρον = garum. — 19. Cf. De Vit. *Gannium; taberna;* read with Ball *ganeo: tabernarius.* — 20. Ellis suggests *gaunacum.* Varro L. L. V. 35, speaks in the same chapter of *gaunacum* and *gausape;* cf. Not. Tiron, p. 158, *gausapum: gaunapum,* Gloss. Lat. Gr. *gausapa:* Βαρβαρικὸν πάλλιον, so that *gausapum* may have been the reading, but the alphabetical order favors *gaunacum.* — 21. l. genealogia, but the MS. has the dittography, and in 22 I have neglected to indicate that *ne* in *generaliter* is omitted and inserted in the margin, it is doubtful whether by first or second hand. — 25. l. genitale. — 27. l. fatum decretum with Bod.; cf. De Vit and Prod. 118, f. — 30, cf. 46, l. gestatum: portatum, so *r* is dropped before *t* in 36. — 32. l. generationes. — 33. l. generositas. — 35. l. with Bod. *gerula: nutrix conportatrix;* cf. Amplon. 335, 118, *gerula nutrix quae infantes portat.* — 38. l. vigor; cf. De Vit. — 40. l. geniales lecti; cf. Isid. Or. VIII. 11, 88, *Genium* autem dicunt, quod quasi vim habet omnium rerum gignendarum, seu a gignendis liberis, unde et *geniales lecti* dicebantur agentibus, qui novo marito sternebantur — 41? cf. Paul. 94, 10, *genuini dentes,* quod a *genis* dependent (perhaps *necis* is a corruption of *genis*); Bod. *genuinum nature initium id est insertum vel intimum densum* (l. dentium) *vel qui interius in ore hominis nascitur*; and Hild. G. 41 n. — At least two glosses are here confused, see Mai. VIII. 261, *genius: Deus naturae,* etc., *genuinus, naturalis; genuinus, deus maxillaris;* and Hild. G. 40 and 43, *geminum, naturae, initium idem insertum.* — 42. l. adorationibus. — 43. l. supputandi. — 44. l. gerulus: baiulus. — 47. l. Getae . . . Thraces. — 49. Loewe, G. N. 248 ff., gives from different sources, *Anser: sclingit; anseres gliccire, vel sclingere; grinniunt anseres;* cf. Paul. 95, 5, *gingrire anserum vocis proprium est. Unde genus quoddam tibiarum exiguarum gingrinae.* Gloss. Philox., *Gingriunt:* χῆνες ἐκβοῶσιν, Hence read, *Gingriunt anseres.* — 50. Bod. *geniatus, genialis, gratus;* cf. GENIATUS. — 51. l. genae: malae; cf. Isid. Or. XI. 1, 43, *Genae* sunt inferiores oculorum partes, etc., and 44, *Malae* sunt eminentes *sub oculis partes.* — 52. l. gerontocomium . . . homines, for *propter* with abl., see Rönsch, 408. — 53. l. pneumon. — 54. The letter following *ext* is illegible. Both Kaegi and Goetz read *ext,* but Goetz thinks *t* may be *e.* I would read et palaestra et auditorium magistrorum . . . . alterum ab *exe(rcendo)* or *exe(rcitio)*; cf. De Vit and Plac. 49, 4, *Gymnasia* dicuntur loca, in quibus nudi homines exercentur, unde omnium prope artium *exercitia gymnasia dicuntur;* and Isid. Or. XV. 2, 30, *Gymnasium generalis exercitiorum locus.* Tamen apud Athenas erat locus ubi discebatur philosophia et sapientiae exercebatur studium. Nam γυμνάσιον Graece vocatur, quod Latine *exercitium* dicitur, hoc est meditatio. — 56. l. gymnasia; Cf. Isid. XV. 2, 40, speaking of balnea, *Haec et gymnasia dicuntur,* etc. Amplon. 334, 7, *Gymnassis: balneis.* — 58. l. gorytus = corytos: pharetra; cf. Serv. Aen. X. 169, *Coryti proprie* sunt *arcuum thecae;* dicitur tamen etiam sagittarum *quas et pharetras nominamus.* — 59. ? perhaps gignit: generat, and gignitur: nascitur, but what *praeluium* (*prae* in abbreviation MS.) stands for I am uncertain. — 60. l. gymnasia; a very confused gloss, probably from two or more glosses; cf. above 57, and Amplon. 334, 19, *Gymnicus agon; locus ubi leguntur diversae artes,* and glosses cited by De Vit. — 61. l. gilvus: inter album et nigrum medius color; cf. Loewe, G. N. 150,

Mai. VIII, 263, *gilnus color equi inter album et rufum quod et gilbus dicitur*, and Hild. G. 57. But Servius Georg. III. 81, *Gilvus autem est melinus color, multum autem ita legunt Albis et gilvo* ut non *album* vel *gilvum* sed *albo-gilvum* vituperet. Bod. *gilbus color medius inter album et rufum.* — **63.** l. gratissimus. — **65.** l. grandaevus: senex. — **68.** l. graditur. — **69.** l. grandi nato: ex nobili natus; cf. grandi alumno, Hor. Epod. XIII. 11. It can hardly be due to a misunderstanding of *grandis natu.* — **70.** The *et* indicates that there has been a confusion of two glosses; cf. De Vit, *Gritmanus: praetor rusticus, praefectus pagorum*, and Du Cange, who gives "*Grietmanni* et *Grietania: praefectura voces Frisionibus familiares.*" — **71.** l. cremia: siccamina. — **72.** l. gryphes. **75.** l. herbae. — **77.** Cf. Verg. Aen. V. 40 with Servius' note. — **78.** Cf. GRASSATOR. — **79.** Cf. Bod. *grumulus ager tractus*, Mai. VI. 526, *grumulus agger;* Paul. 96, 16, *grumus: terrae collectio, minor tumulo*; Nonius 15, 18, *grumus* dicitur *agger:* a congerie dictus; *aggeratum* might be the participle, but perhaps for *agger tumulus*, cf. **74.** — **80.** l. gratuitum: gratis (?); cf. Bod. *gratuitum non venditum id est gratia datum.* — **84.** l. gnavus. — **86.** for *pressus*, see Philarg. Verg. Georg. III. 83, *neque satis diluti coloris, neque nimium pressi;* glauci in v. 82, he explains as *subviridis albo mixtus.* — **87.** l. glebo, cf. Prod. 117, and Phill. *glebo dicitur ruricola stivarius.* — **88.** l. gleba: caespes. — **89.** l. globus. — **93.** l. glossa, cf. Prod. 1 f. — **95.** l. maiestas. — **96.** l. acervat. — **97.** l. glos: viri soror. — **98.** l. Gnosia, cf. Verg. Aen. VI. 23. After *gl.* room is left for another gloss. — **99.** l. humile tenebrosum. — **100.** l. tabernarum. — **101.** l. profundus.

H.

1. l. arundo. — **2.** l. bibit. Hild. H 26 n. says, "Pro *implet* quod ferri nequit, lege *videt*," but he neglected to notice Nonius 319, 12, *Haurire* significat *exhaurire* vel *implere*, with examples from Lucretius and Lucilius; see also **14.** — **5.** l. has. — **8.** l. oscitat. Bod. *halat oscitat sive olet.* — **9.** l. gustata. — **10.** ? = Hebrew *hato*, a sinner, suggested through Ellis by Neubauer. I had thought of (*H*)*aretalogus*, which in Gloss. Pap. is explained by falsidicus; cf. Juvenal XV. 16, mendax aretalogus. — **14.** Cf. **2.** — **17.** l. habenae . . . lororum. For *tenaculum* Lexx. cite only Terent. Maur. Praef. 29. — **18.** l. anhelat. — **20.** i. e. heros: vir fortis; herus: dominus; cf. **32.** — **21.** l. heri. — **22.** Perhaps for chaere χαῖρε: ave. Cf. Lucilius (p. 135 Müll.) χαῖρε, inquam, Tite, etc., where two MSS. have *chere;* cf. also Martial V. 51, *Ave* Latinum χαῖρε non potest Graecum. — **23.** l. ebenum. — **24.** l. domina. — **25.** Cf. Bod. *heliotropium nomen gemme vel flores herbe latine soliquia dicitur.* l. heliotropium: nomen gemmae et herbae, solisequia; cf. also HELIOTROPIUS. — **28.** l. haesitat. — **29.** = ὕδωρ. — **30.** l. hirsutum. — **31.** l. hirudo. Helmreich Archiv I. 323 shows how *sanguisuga* supplanted *hirudo.* — **33.** l. nobiles sunt; for the use of *dimitto* see Prod. 422, where a similar gloss is given from Cod. Leidensis 191[8]. — **34.** l. eccui. — **35.** l. morio. — **36.** Cf. Prod. 431, *hostispices: haruspices*, where also the form *histispices* is given from other glosses, but not *hestispicus.* — **37.** l. Erebi. — **38.** l. heroum; cf. Mai. VI. 526, *heroes; antiqui.* — **39.** l. eremum. — **40.** Cf. above p. 133, Bod. *holitor: ortolanus, orticula.* — **41.** l. herbidum. — **42.** l. hymenaeum. Cf. Donat. Ter. Ad. V. 7, 7, *hymenaeum putant veluti hymnum vocari virginalium nuptiarium.* Probably *novum nuptus* comes from a fuller gloss. — **43.** ? Cf. De Vit, *Herenicas: antiquas, heroicas*, Isid. (an Hernicas?) *Hernicus: durus; Hernicas: antiquas; Herpicus: antiquus; Heroica: antiqua; Heroici: antiqui.* — **44.** l. Haemonia. — **45.** Cf. De Vit and Ball. *herma: castratio nec vir nec mulier.* — **47.** l. haesit. — **51.** Cf. Bod. *herculaneus: eunuchus*, found also in numerous glossaries. Emend, *eculiatus* = *excoliatus.* Cf. Petron. 44, 14, *coleos habere*, Loewe G. N. 107, and EXCASTRATUS. — **52.** l. eiulatus, *he* seems to be beginning of another gloss. — **53.** l. haereses: sectae. — **54.** l. ingemescentis. — **56.** Cf. above **45** and Hild. H 42. — **59.** l. comedentes. — **60.** l. Hesperias. — **61.** Cf. HEBRAEI in Onomasticon. Bod. *haebraeorum: transeuntium.* — **62.** Cf. above p. 138. — **63.** l. laude. — **66.** l. hydromantes; cf. Serv. Aen. III. 359. — **68.** Cf. Mai. VI. 537, *Hylidri: serpentes aquatici*, for ytri l. hydri. — **69.** Cf. Bod. *hidroplasmus quas cantio conponit organi*, and Mai. VI. 527, *Hydroplas-*

mus; qui cantionem conponit organi. — **71.** l. iliis. — **72.** Perhaps for *bubulcus* or *subulcus;* cf. S **335**, subulcus: pastor porcorum, for which *hyulcus* might be a hybrid formation (cf. ὑοπόλος). Compare Bod. *hulcus pastor;* Mai. VI. 526, *Hiticus* (also *Hiulcus*) *pastor.* — **72.** l. hyacinthum: flos purpurea. — **74.** *o* above *a,* l. unio; cf. Bod. *himo margarita preciosa.* — **75.** grassi = crassi is intelligible as a gloss for hirti, cf. **85**; but I do not understand *anni.* Perhaps there is some confusion with a gloss Hete (= ἔτη) anni, or with **122**, *horne: huius anni,* or with *hippi: manni.* — **77.** l. hippagus. — **78.** Bod. *hicterici: ydropici,* Phill. *hictei* (l. hicterici) *sunt ydropici vel elephantini, hicterim enim Greci vocant elephantiam;* cf. Isid. Or. IV. 8, 12, and 13. l. icterici: hydropici. — **83.** l. hisco . . aperio. — **84.** Cf. Bod. *hyr vigel interpretator; hyr caldaico sermone latine vigil interpretator.* — **85.** l. setosa . . *plena* is perhaps an explanation of *fetosa.* — **86.** l. horridum. — **87.** l. mimus. — **88.** l. hymenaeos; cf. Verg. Aen. I. 651. — **89.** l. hiulcum . . . aperiens . . hians. — **90.** l. hippagus . . . iumentaria. — **91.** Cf. Hild. H 61 n. — **92.** l. hiantes. — **93.** Cf. De Vit and Ball. *hystriones, qui gestus impudicarum feminarum exprimebant.* — **96.** Cf. **101** and Isid. Or. XV. 1, 5, . . . *Hierusalem* quae postea *a Salomone Hierosolyma* quasi *Ierosolomonia* dicta est. . . . . *Hierusalem* autem in nostro sermone *pacifica transfertur.* — **97.** Perhaps stellę septem was first written; cf. Serv. Georg. I. 138, *Hae sunt in fronte tauri in formam Y literae. Unde etiam Yadas dici volunt. Has alii septem, alii quinque dicunt,* etc., hence read in modo Y litterae. — **100.** l. hisco: miror; but the active *miro* occurs in Reichenauer Glossen 566, *Stupebant: mirabant.* — **101.** Cf. above **96.** — **102.** l. historiographus: descriptor. — **103.** l. hystrix. — **106.** l. villosus. — **107.** l. hiberna . . . calida . . hiemem. — **108.** l. memorialia. — **109.** Cf. **31.** — **110.** l. hyaena . . . genus beluae. — **111.** l. fissura; cf. Bod. *hiatus: fisura vel apertio terrae, patefatio vel vorago.* — **112.** l. hybleus . . . floridum. — **113.** l. frigus. — **114.** l. desinere. — **118.** Two glosses confused, hostiae: lustra (or hospitia: lustra?) and hospita: peregrina. — **122.** l. horni. — **124.** Cf. **128**, and Prod. 258. — **125.** Cf. Prod. 339, l. horti; cf. Bod. *holitor horti vel olerum cultor.* — **127.** l. suadeo. — **128.** Cf. **124**, l. aequamentum; cf. Nonius 3, 26, *Hostimentum est aequamentum,* etc. Unde et *hostire* dicitur . . . id est *aequa reddere.* — **129.** l. oscitans . . . spiritum halans. — **130.** l. ironia . . vituperare. — **132.** l. vero. — **133.** l. homuncio. — **134.** l. honorat. — **135.** l. homullus. — **138.** l. mortalia.

I.

2. l. custos — **4.** l. damnum. — **8.** Cf. Lagarde Onom. Sacra, p. 32, Iabin intellegens vel sapiens. — **9.** l. iactat. — **10.** Ball. *Iacturarius qui frequenter iacturam patitur;* cf. Loewe G. N. 166; l. *mortalitatem.* — **12.** Cf. Ball. *iapex velox, agilis;* l. Iapyx. Confusion of two separate glosses. — **16.** l. Hieratica (for *hieroglyphica*) littera. — **20.** l. splendor . . . ortum; q. = quae, perhaps originally referred to stella. Cf. Serv. Aen. IV. 130 and Isid. Or. III. 70, 18, *Lucifer . . hic proprie et iubar dicitur eo quod iubas lucis effundat sed et splendor solis ac lunae et stellarum iubar vocatur.* — **24.** l. summitates. — **29.** l. nuces. — **30.** Cf. Ball. *Iustitium luctus publicus vel publici iuris silentium;* l. luctus publicus. — **31.** l. iugum: servitutes; cf. Bod. *Iugum servitutis servitus dominatio captivitatis.* — **33.** Cf. Hild. I 14, *Icenisma, imago sine pectore,* but *fine pectore* makes good sense; perhaps *aut caput* is to be read; cf. Bod. *iconisma imago stagma vel figura imperatoris.* — **36.** l. identidem; cf. Plac. L. G. 21, 22, *identidem idem ipsum.* — **39.** l. proprietas. — **41.** Cf. Isid. Or. VIII. 11, 14, Quidam vero Latini ignorantes Graece imperite dicunt *idolum ex dolo* sumpsisse nomen, quod *diabolus creaturae cultum divini nominis invexit.* — **45.** l. ignominia. — **46.** l. ignobili; cf. Verg. Aen. I. 149. — **59.** l. imbecilles. — **60.** l. acerbum. — **62.** l. barbis. — **94.** l. in promptu. — **66.** l. impopulabile: inlaesum; cf. Hild. I 286. — **68.** l. impendium. — **69.** l. inerditus. — **74.** Probably *in burim;* cf. Ball. *imburim incurvatio* and *Imburim pars curva quae aratro iungitur.* It refers to Verg. Georg. I. 170, where Serv. *In burim, in curvaturam,* nam *buris* est *curvamentum* aratri, etc. — **85.** Bod. *in procinctu;* cf. Serv. Georg. I. 170; Ball. *In procinctu in militia, in apparatu.* — **89.** l. immitis. — **91.** l. in murice; cf. Verg. Aen. V. 205. — **94.** Probably for in praecelsum: in excelsum. — **95.**

l. in praeceps. — **96.** l. impetrat. — **97.** l. implexa; cf. Ball. *incorporata.* — **97.** Cf. **85.** — **102.** ? l. investis imberbis; cf. Hild. I 301. — **104.** l. improvidus. — **110.** l. incola. — **111.** l. incolumis. — **118.** l. incestum. — **127.** l. incidit: secat; cf. Reichenauer Glossen 310, Seccabis: incides (but perhaps for incidit in errorem). — **128.** l. incutit: inicit. — **129.** l. incessunt. — **130.** requisitio, given by Lex. as a. λ., must be here taken in the sense of examination of auspices. — **135.** l. nobilem. — **136.** Cf. Serv. Georg. III. 371, *Cassibus* i. e. *retibus.* Hinc est quod *et incassum dicimus* i. e. *sine causa* quasi *sine cassibus* sine quibus venatio est inanis. — **138.** l. desertum; cf. Bod. *incelebre, desertum desolatum.* — **141.** l. proficiscere. — **152.** Cf. Serv. Aen. XI. 651, *indefessa infatigabilis.* — **155.** l. index: significator. — **158.** l. dilationes; cf. Hild. I 160. — **161.** l. indutiae or indutias; cf. De Vit. — **164.** Cf. Bod. *inermis: sine armis vel debilis.* — **165.** l. iners. — **169.** l. energumena: daemoniaca. — **170.** Cf. *in excessu meo,* Vulg. Ps. 115, 2.; l. excessu. — **174.** l. cenulis. — **175.** l. in impetu. — **177.** l. indidit. — **178.** l. aetas iuvenalis quae dolorem . . . — **180.** l. doceri. — **182.** l. infitiis; cf. **212.** — **184.** l. indigestum. — **186.** l. inexorabilis. — **187.** Cf. Hild. I 163; l. incrementum. Cf. Bod. *Indoles certe spei vel bonae naturae progenies incrementum vel origo in puero vel ingenium moris.* — **188.** l. inertia, perhaps confused with *energia.* — **190.** l. placet. — **191.** l. insatiabilis; cf. Verg. Aen. VIII. 559. — **192.** Cf. Hild. I 68, and Ball. *inedia: fames vel ieiunium*; l. inedia: fames, ieiunia. Goetz reads in MS. geiunia, but Kaegi as I have printed. — **193.** l. in extasi. Ball. has *in excessu mentis;* cf. **170.** — **196.** l. infausta: infelicia. — **197.** Cf. Hild. I 189 and Bod. *Infastus in honore positus vel qui ad sacra pertinent;* l. in fastis: in honore. — **203.** l. inferaces: infructuosae; but perhaps *infetaces* can be kept; cf. Loewe G. N. 150. — **204.** Ball. *Infrenis irreverens hoc est qui frenis non regitur ut Numide infreni;* cf. Serv. Aen. X. 750. — **206.** l. intulisti. — **207.** l. impulsor: persuasor, but see Loewe G. N. 151. — **208.** l. infulis. — **209.** l. infulae: vittae sacerdotales; cf. Ball. *Infule ornamenta dignitatum sive vitte gentilium sacerdotum.* — **211.** Cf. **182.** — **212.** Cf. Bod. *Infitiae: mendacia vel negotiationes* (l. negationes). — **213.** Probably a confusion of two glosses; *infamare: crimen inferre* (**211,** infamis) and *infitiari: negare.* — **215.** l. fucatum. — **219.** Cf. Paul. 112, 7, *infrequens appellatur miles, qui abest afuitve a signis.* — **220.** Cf. INFORMITAS; *incompositio* is not in Lexx. — **223.** l. ingluvie: gula; cf. Paul. 112, 2, *Ingluvies a gula dicta,* etc. — **225.** Cf. Nonius, 322, 31, *Ingenium* est *naturalis sapientia.* — **227.** l. ingeminans . . duplans. — **229.** Confusion of two glosses, ingluvies: voragines, and inluvies: sordes; cf. **247** and Nonius, 126, 25, *Illuvies, sordes.* — **230.** l. fert. — **232.** l. ingruentes. — **235.** Cf. Serv. Aen. IV. 41 f. — **236.** l. attonitus. *ut tentus* seems to be for *attentus* or *intentus:* cf. Serv. Aen. IV. 64, *inhians, intenta per sollicitudinem.* **239.** l. iniit, inchoavit. — **240.** l. adversaria. — **241.** l. inicit: inmittit; cf. **243.** — **246.** l. inlicit . . . suadet. — **248.** l. inlibata. — **250.** l. inletabilis. — **253.** l. inliciunt . . . persuadent. — **256.** l. innexa; perhaps for *amplexa* we should read *implexa.* — **257.** l. innuba. — **262.** l. insperata. — **263.** l. INNORMIS. — **267.** conditionis? Isid. Or. IX. 4, 37, has *Inquilini vocati quasi incolentes aliena. Non enim habent propriam sedem sed terra aliena inhabitant;* and in preceding paragraph, under *Coloni,* Sunt enim aliunde venientes atque alienum agrum locatum colentes ac debentes *conditionem* genitali solo propter agri culturam sub dominio possessoris, pro eo quod iis locatus est fundus, so that there may be some connection with *conditio* or *condictio.* — **269.** Cf. Verg. Aen. III. 89, *Animis inlabere nostris. Inlabere* is explained as if it were an infinitive. — **270.** Probably inlicita voluptas to be read. — **272.** l. inlustres: nobiles. — **275.** Cf. **245** and **253**; l. inliciant. — **278.** l. innixi; cf. De Vit. — **279.** l. viro. — **281.** l. innumerum: innumerabilem. — **282.** l. nutibus. — **285.** l. in horamate; cf. HORAMA. — **288.** l. inquies. — **297.** l. instigat. — **300.** l. inhaerens. — **303.** l. inridet. — **305.** l. quaerendum. — **306.** l. insignem; cf. Verg. Aen. I. 10. — **307.** So Hild. I 347, where *invadere* is read for *evadere.* I still think *insultare* may have been the original reading. — **310.** l. inscitia. — **311.** l. inolevit . . inhaesit. — **316.** l. insertabam. — **317.** l. instinctu dei. — **322.** l. renovat. — **326.** l. superbire, which was written *supervire* and then *supervivere.* — **328.** l. diffindere; cf. Hild. I 336. — **329.** l. intrinsecus: interius; repeated **335.** — **331.** Cf. Verg. Aen. III. 587. — **332.** l. interpolata; *revocata* is here used in the sense of *renovata.* — **336.** l. intriverat. *minuaverat* in sense of crumble into small pieces is supported by *minuatim;* cf. MINUO. — **340.**

l. internosci: cognosci. — **342.** l. interpolavit: interrupit. — **343.** Is *interlinitus* a vulgar form from *interlinere?* Cf. De Vit. — **346.** l. UNITIO. — **352.** l. intercapedo; cf. Paul. III, 3. — **353.** l. fide. — **354.** l. integer: sanguine. — **355.** l. interloquar. — **356.** l. varieque. — **357.** l. intemptant = intentant. — **358.** l. minantur. — **360.** ? Cf. Mai. VI. 529, *intermina: internuncia obiecta vel mediatrix*, and other glosses cited by Hild. I 385 n., who propóses to read *intermedia*. — **361.** l. notum. — **365.** l. interpolare: variegare. — **366.** The reading is doubtful, according to Goetz and Kaegi, and the emendation difficult. The first part of the gloss bears some resemblance to Hild. C 189, *Comminando, intemptando*, and the second part to Hild. I 378, *interlitus, intercessio verbi quando inter se obliterantur*, the first words of which occur at about the same place on next page; see **382.** — **367** = tempus inter primam et novissimam lunam; cf. Isid. Or. III. 54, *Interlunium lunae est tempus illud inter deficientem et nascentem lunam*. — **369.** l. inter pocula. — **372.** Cf. Mai. VI. 529, *Intrio: in fundo vel tute* (followed by *intristi: parasti*). I propose for *intrio, intero;* cf. Cato R. R. 156, 6, *infundito* in catinum, uti frigescast eo *interito*, etc., and Gloss. Pap. *Intereo: infundo; Interitum: infusum*. — **372.** l. coniector. — **376.** Cf. 350. — **377.** l. species. — **378.** Cf. INTERLOCUTIO. — **380.** l. internicionem. — **382.** Cf. note on **366.** *intercisio* seems to make better sense than *intercessio*. — **383.** Perhaps for invindicatum. — **384.** Cf. Paul. 368, 9. — **388.** l. invenustus. — **391.** l. in vestibulo: in ingressu. — **395.** Cf. INVISOR. — **398.** l. invisunt. — **399.** l. adiri. — **401.** l. irritum. — **403.** l. stimulat. — **404.** l. derisio. — **406.** l. Ister Dacus; cf. Verg. Georg. II. 497, *Dacus ab Histro*. — **407.** l. stromatis: commentariis scientiae; so Mai. VI. 546. — **408.** The Isterum Danubium is written in fainter ink; the proper gloss for *Isaurum* seems to have fallen out. — **411.** l. iterum atque iterum. — **414.** l. itineris. — **415.** l. Ituraeus; cf. Verg. Georg. II. 448. — **416.** ? l. stromateus: opus varium seu lacinium (lacinia) varia diversitate contextum; cf. De Vit.

K.

1. Cf. Isid. Or. V. 33, 13, Quidam autem *Kalendas* a *colendo* appellari exstimabant. — **2.** l. chalybem. — **3.** l. chalybs: furca. — **4.** l. Charybdis. — **5.** l. calones . . galearii; cf. De Vit and Hild. C 20 n. — **6.** l. charadrius . . alba . . prima eius; cf. De Vit under Charadrus.

L.

3. l. FOCULARE. — **5.** De Vit Lex. cites only one example of *Daemoniosus* from Rufin. 3, Recognit 3. — **6.** Mai. VI. 530, has *Lacerna, stola vestis* and *Lacernum; stola vel vestis*. — **7.** l. labitur. — **8.** l. labos. — **10.** l. carnes . . . gladiatorum. — **13.** l. caeduntur (lapides); cf. Paul. 118, 13, *Lapidicinae ubi exciduntur lapides*. — **16.** l. debilem. — **17.** Cf. TIGNARIUS. — **18.** A confusion, I think, of two or more glosses, as e. g. lagunculae: vasa fictilia and laterna id est lucerna; but see **43**, and Prod. 108 and 135. — **20.** l. decipit. — **22.** Cf. Verg. Aen. II. 551; l. serpentem — **24.** l. labefactare. — **26.** l. bracchiorum. — **27.** l. stellae fulgentus; cf. Plac. 62, 21, *Lampenae, stellae quaedam sic dictae*. — **28.** ? Perhaps for LACTARIS; cf. Nonius 16, 13, *Lactare est inducere vel mulcere, velle decipere*. — **30.** ? Cf. LAMIA and Gr. λάμνα = λάμια; see also Y **7**, *ypnix:* animal quasi ad similitudinem *pardorum* quas alii *lamminas* dicunt. — **31.** Cf. Serv. Aen. I. 686, *latex ab eo quod intra terrae venas lateat*. — **35.** l. lator: portator. — **37.** Cf. LAVERNA; l. filios alios seducit; cf. Hild. L 4 and 5. — **39.** See **37.** — **43.** Cf. De Vit and Prod. 108. — **45.** l. camerae. — **47.** The MS. has nothing after Tornus, but empty space is left sufficient for ten letters. — **48.** l. missoria. — **49.** l. umbra; cf. De Vit, Larva: umbra exerrans, and Larva: simulacrum. — **50.** l. labilis. — **52.** Cf. Loewe G. N. 252, l. lirantes, so Mai. VI. 532; but cf. Mon. 6210, *laborat* per sincopen *larat* facit. — **55.** l. LARUS . . . gavia (in marg. m. 2, add. after *guia orum* Goetz). — **57.** ? Confusion of luitur: solvitur, and labitur: cadit. — **58.** See above, p. 138. — **60.** l. lapit . . . . dolitat; cf. DOLITO; cf. Paul. 118, 12, *Lapit: dolore afficit*, and Nonius 23, 7, *Lapit significat obdurefacit et lapidem facit*. — **61.** Cf. LATOMUS, l. lapidum caesor. — **67.** l. legio Martia: numerus. — **72.** l.

caccabos aeneos. — **73.** l. lictores. — **74.** Cf. LECTICALIS, not found in any author; see Loewe G. N. 167. — **75.** ? Seems to be a corruption of *Levisata genus armorum est*, Hild. L 110; cf. Prod. 45, *Levisata: de tonica* (l. tunica) *dicit militarum;* Leid. 67, F 2. — **76.** seductrix is found in Tert. adv. Marc. 2, 2. — **78.** l. seductiones, persuasiones. — **80.** Cf. **85** and **87.** — **86.** l. honestum. — **87.** l. dulcedinem, decorem. — **90.** Cf. De Vit Galen. MS. ad. Glauc. 1, 35, *Frigore et febre recedentibus sudor consequitur et leptopyria.* — **91.** Cf. Verg. Aen. VI. 287. l. hydra. — **93.** l. lethargus . . . comprimuntur aegri ad. — **94.** l. levigabis: lenibis. — **95.** l. corculum; cf. Isid. Or. VII. 9, 19, *Iudas Iacobi, qui alibi vocatur Lebbeus, figuratum nomen a corde, quod nos diminutive corculum possumus appellare. Ipse in alio evangelista Thaddaeus scribitur*, etc., hence l. Thaddaeus for *deus.* — **97.** l. Lilyaeum: promontorium. — **99.** Truncated; cf. Placid. 62, 2, *Libare est leviter aliquid contingere*, etc ; Serv. Aen. I. 256, *libavit leviter tetigit.* — **100.** ? Perhaps a corruption of Hebrew Nephilim, which occurs Gen. vi. 4, Numb. xiii. 33, and in the old version is rendered giants. In the revised version Nephilim is kept. — **101.** = Liburna. — **102.** l. Liburni: accolae Adriatici. — **103.** l. libamina. — **105.** l. libitina. — **106.** Perhaps librat is to be read; *sicilę* I do not understand, unless by some mistake *libra* was glossed as *sicel.* Cf. Isid. Or. XVI. 25, 18, or it may be for Siciliae and belong to **97**; so Bod. has *lilibeum urbs siciliae ā* (aut ?) *promontorium Syciliae.* — **107.** l. liberalis. — **108.** l. aequant. — **109.** Cf. **105**, l. conduntur. — **113.** l. venditio. — **114.** Cf. LICESSIT. — **115.** l. licitatio. — **116.** l. pretio. — **117.** l. apparitor; cf. above, **73.** — **118.** ? So Mai. VI. 521, but *quibus multa licent.* — **119.** l. promissio. — **121.** l. Lyaeum. — **122.** Cf. Loewe G. N. 217, l. argutus. — **123.** l. provincia . . . Mediolanum. — **125.** Servius however commenting on Ecl. II. 18, *Alba ligustra*, says, *Ligustrum autem flos est candidus.* — **126.** l. limes: finis terminus. — **130.** l. limis . . obliquis; cf. Paul. 116, 1, *limis obliquus id est transversus;* Ter. Eun. 3, 5, 53, *ego limis specto*, where Eugraphius, "Quidam intelligunt *limis obliquis* . . . . . Alii intelligunt *limis oculis* paululum *tortis.*" — **131.** *fantasticus* is here used for *fanaticus.* — **132.** l. limbus. — **133.** l. lychni. — **135.** l. liquuntur. — **136.** Cf. *maculosae tegmine lyncis*, Verg. Aen. I. 323. — **138.** for this use of *dimittit* see Prod. 422. — **141.** l. cytharae. **143.** l. lethargus. — **144.** l. litat: immolat. — **145.** l. lituus. — **148.** Cf. above, p. 131. — **152.** l. longaevi. — **153.** Cf. Verg. Aen. II. 697. — **154.** *logion* is written on the margin by second hand. Cf. Isid. Or. XIX. 21, 6, *Logion* quod Latine dicitur *rationale, pannus* duplex *ex auro* et quatuor textus coloribus . . . . . cui intexti erant xii. pretiosi lapides. Hic *pannus superhumerali contra pectus pontificis* annectebatur. — **158.** l. minime. — **160.** l. erogationes quae; cf. De Vit, and Paulus, 119, 6 and 8, *lucaris:* pecunia quae *in luco* erat data. *Lucar* appellatur *aes* quod *ex lucis* captatur. — **163.** incubi = Panis; cf. P 74, Pan: ingibus; see **174.** — **165.** l. quinquennium. — **168.** Left incomplete; cf. Ball. *luteres cantari vel aquarii sed cantarus graecum nomen est.* — **169.** l. Luculleum. — **170.** l. lucem apparet. — **172.** l. elabescens not in Lexx. — **174.** l. dicitur (Lupercus). — **175.** l. sordidum. — **176.** For diluvius m. see Appel p. 85. — **178.** l. luscinia: avis. — **180.** l. torvo; cf. Verg. Aen. III. 677. ? diro hae (according to Goetz *hac* not *hae* in MS.). — **182.** Emend from Isid. Or. VII. 9, 23, *Lucas ipse est consurgens, sive ipse elevans* eo quod elevaverit praedicationem Evangelii post alios.

M.

1. Cf. Mai. VI. 532, *macte: magis autem*, evidently a corruption of *magis aucte.* So Servius Aen. IX. 641, *macte; magis aucte, affectate gloria. Aut tam* seems to be a corruption of *autem;* cf. De Vit. — **3.** l. Macetae. — **4.** l. pastorum. — **7.** Cf. MAGNES. — **9.** l. Punicum. — **10.** = μαλακία; cf. MALACIA. — **11.** l. mala gramina; cf. Bod. *mala gramina, noxias herbas venenatas.* — **12.** l. Maiae sacrificabant; cf. Prod. 377. — **13.** cf. MANUA. — **15.** l. comesta. — **16.** l. mandimus: comedimus. — **19.** l. animae. — **20.** l. numerus. — **21.** l. manipuli (for *mapuli*) . . cremiorum . . capiantur. — **22.** *manuale* here in the sense of napkin. *Orarium* is used by Lucilius in this sense. — **23.** Cf. Hild. M 54; manicat per manum tenet vel a mane surgit. There probably was a verb formed from *manicae*, as we have *manicarius.* Otherwise we might suppose *mancipat* to have been

confused with *manicat.* — **25.** l. manu-capta, evidently in connection with preceding gloss. — **28.** l. Mavortia . . . pugnam pertinent. — **30.** Cf. Paul. 125, 9, *maculenti, macie tenuati.* — **32.** l. pollutus. — **33.** l. casae; cf. Paul. 147, 16, *mapalia casae Poenicae appellantur*, etc. — **36.** l. animi. — **37.** l. malleator: faber ferri. — **38.** l. machinationes commenta astutiae. — **39.** l. illuminatrix. — **40.** l. saccellum. — **41.** l. libri. — **42.** l. mastigia . . . servus. — **43.** l. matris. — **46.** l. manens. — **47.** Cf. MARANATHA. — **48.** De Vit cites Margalet (unum ex XII. signis astronomicis), Virgil. Gramm. p. 115, Mai. — **50.** l. martyrium. — **51.** l. murrina. — **52.** l. mastigiae: taureae. — **53.** Cf. De Vit, *mattus: tristis* and *mactum est; humectum est, emollitum infectum. Mattus* occurs in Petronius in sense of intoxicated. Perhaps there has been some confusion with *maestus: tristis.* — **54.** l. matrimus: matris. — **56.** ? perhaps for mavissem: magis voluissem. — **57.** Cf. Isid. Or. VII. 9, 22, *Marcus, excelsus mandato*, utique propter Evangelium altissimi, quod praedicavit. — **59.** l. melos: dulcis. — **60.** l. meditullium; cf. Plac. 65, 1. — **61.** l. pellis ovina simplex, qua monachi utuntur, ex uno latere (dependens); cf. MELOTE and Amplon. 349, 19, *merotis: pellis simplex ex uno latere dependens.* — **63.** l. metator: arbiter, locator; cf. Tert. adv. Marc. 1, 8, *tempus arbiter et metator initii et finis.* — **64.** Cf. MELOPOEUS; l. factor. — **66.** l. decurrit. — **67.** l. menstruum. — **68.** l. Maenalias(os): cf. Verg. Ecl. VIII. 21, *Incipe Maenalios.* — **69.** l. tabernarum . . . committuntur. — **70.** l. animo. — **71.** l. mergit. — **73.** l. commercia. — **74.** Kaegi reads *Bahe.* Emend Maenades: Bacchae; pars seems not to belong here. — **75.** ? l. mergites: fasces spicarum; cf. Ball. *mergites: spicarum fasces*, Serv. G. II. 517, *Manipulos spicarum mergites dicimus;* cf. MERGAE. — **76.** l. myrmex. — **78.** l. balneator; cf. Porph. Hor. Ep. I. 14, 14, *mediastinus Incola mediae civitatis: an in officio balneatoris mediastinus;* see also Porph. Hor. Sat. 1, 5, 35. — **80.** l. me ita Castor: sit (siet) Castor; cf. Paul. 125, 4; *mecastor et mehercules iusiurandum erat, quasi diceretur, ita me Castor, ita me Hercules, ut subaudiatur, iuvet.* — **81.** Cf. Prod. 397. — **82.** Cf. Amplon. 351, 114 and 115, *melops, dulcissonus; melopeum, dulce conpositum.* — **83.** l. Commodus; cf. Lamprid. Commod. 11, *Menses quoque in honorem eius pro Augusto Commodum, pro Septembri Herculem*, etc., *adulatores vocabant.* — **84.** l. fustes; cf. Paul. 124, 1, *Mergae furculae quibus acervi frugum fiunt*, etc., and Hild. M 118; Bod. *merges: fustes cum quibus messes colliguntur.* — **85.** Cf. **82** and **64.** — **87.** l. Micipsa: vir (?); cf. Bod. *Micipsa nomen est regis.* — **88.** l. assidue. — **90.** Cf. MINICIUS. — **92.** l. gestae. **93.** Cf. Serv. Aen. IV. 88, *minae, eminentiae murorum.* — **96.** l. μυρμηκίας (cf. myrmecias and myrmecium), verrucas. — **97.** l. praefiguratum. — **98.** l. miscellaneum: COMMIXTICIUM. — **99.** l. missile. — **101.** l. perturbantur. — **102.** l. cetera parte (or ceteras partes) . . . suscepisse. — **104.** l. exivit. — **105.** l. dimittit. — **107.** l. palea minuta, so Hild. M 127. — **108.** l. myoparo = μυοπάρων: naviculas capha piratarum. — **109.** Cf. Isid. Or. VII. 5, 12, *Michael* interpretatur, *quis ut Deus?* — **110.** l. modificata. — **111.** l. modulatio: dulcedo. — **114.** l. omnis inlicitus concubitus, which seems to have been used as a neuter. — **120.** l. placat. — **121.** l. Molossi: canes. — **122.** l. cogitationes. — **127.** l. iumento . . . ducitur; cf. De Vit. — **128.** l. uxoris. — **130.** l. monumentis. — **132.** l. stilus in MOMENTANA; cf. MOMENTUM. — **134.** l. mulierum . . . equorum; cf. Gloss. Pap., *Munilia pectoralia equorum vel ornamenta in cervice mulierum;* cf. Paul. 139, 9, *monile et mulierum ornatus et equorum propendens a collo.* — **138.** Cf. MONOCEROS; l. quadrupes. — **139.** l. munimenta; cf. **153.** — **141.** l. delectat. — **142.** l. mulctra . . . mulgetur. — **143.** Cf. Plac. 65, 18, *mulcator corporis, qui corpora afficit vel cruciat.* — **144.** l. molossus. — **145.** l. caedit. — **148.** l. sermonis. — **149.** ? mulceo, see **150.** — **150.** l. mulciber; cf. Paul. 144, 2, *Mulciber Vulcanus a molliendo scilicet ferro dictus. Mulcere enim mollire sive lenire est.* — **151.** l. mulceat; cf. Prod. 421. — **154.** *firmitas* perhaps goes with preceding gloss. — **156.** l. caelum, but Isid. Or. XIII. 1, 1, *mundus est caelum et terra et mare*, etc. — **157.** l. cum muris. — **159.** ? l. acceptis; cf. Plac. 66, 4, *municipes, curialium maiores ex eo quod munera fisci idem accipiant*, and Isid. Or. IX. 3, 21, "Dictus *princeps a capiendo* significatione, quod *primum capiat*, sicut *municeps* ab eo quod *munia capiat.*" *Princeps primus* is a corruption, I think, of some such explanation; compare, however, Bod. *municeps; princeps primus vel acceptor muneris.* — **162.** ? l. liberalitas = *liberali(ber)tas.* — **163.** confusion of two glosses *monumenta: testimonia*

and *moenium: murorum.* — **164.** l. munitura (= apron): praecinctorium. — **165.** l. munimen . . . munitione; cf. Isid. XV. 9, 1, *munimen vel munimentum dictum quod manu est factum.* — **166.** l. officia; cf. Isid. Or. XV. 2, 10. — **168.** l. quae. — **169.** Confusion of two glosses, *myricae: frutices virgulta* and *murice: saxa acuta in montibus* (cf. Verg. Aen. V. 205 and Ecl. VIII. 54). — **170** = **173.** — **171.** l. mausoleum. — **172.** Cf. Paul. 144, 14, *mussare murmurare;* Ennius . . . *vulgo vero pro tacere dicitur.* — **173.** Cf. Prod. 106, 121, and De Vit. — **174.** Cf. Prod. 420; l. soricum. — **175.** l. muscipula. — **176.** l. murgiso: murmurator (morator?); cf. Paul. 144, 11, *murgisonem dixerunt a mora et decisione*, Plac. 66, 18, *murgiso, irrisor, illusor*, and Hild. M 226. — **177.** l. mussitat. — **178.** Confusion of two glosses, mollitum: placidum, and mutilat: violat, Hildebrand M 230 cites Mai. VI. 533, *molitat: placitum violat*, and adds, "ubi quid pro *placidum* legendum sit non habeo;" *mollitum* was probably first corrupted to *mulitum*, and then perhaps to *mutilum.* — **179.** l. imminuo . . . saucio. — **181.** Cf. Prod. 283 and De Vit.

N.

1. ? Possibly an explanation of Hebrew proper name *Nabo* or *Nabau;* cf. Lagarde, Onom. Sacra p. 50, Nabo sessio vel superveniens. Were it not for the alphabetical order, one might conjecture *nullo: rescindo.* De Vit cites *nullo, as nullum facio, muto.* — **3.** Cf. Paul. 167, 7, nancitor nactus erit (so Müller, but the MSS. *nasciscitur.* Müller adds, Fuit fortasse NANXSITOR). — **5.** l. navarchus: navis. — **6.** l. navalia . . . naves. — **8.** l. studiose . . . utiliter. — **10.** l. psalterium. — **11.** Cf. Hild. N 6. — **13.** l. nautica. — **14.** Perhaps for *navita: nauta:* l. navus: obsequens (veritatis), so Bod. in a long gloss. — **15.** l. navem. — **16.** l. vigilans; cf. Hild. N 4. — **17.** l. strenue agit; cf. Prod. 344. — **18** ? nauclerus or naupegus; cf. De Vit, *Navaretius: navargus navis magister a navis et Argus*, secundum Papiam, Gloss. Joh. de Janua. Gloss. Isid. *Nauregus: navaretius, naupicus: navis factor.* Gloss. Pap. *Naupicus: navis pater, nauregus et naurigus: navis princeps.* — **19.** l. officium. — **21.** l. navat operam: dat operam. — **22** and **24** belong together; the full gloss was, I think, natrix: serpens epicenon est, or nat*rice:* (ep*ice*)-non est. Cf. H **110**, hiena: epicenon est gens belue. — **25** and **26** should be printed as one gloss; l. nardum pisticum: nardum fidelem; cf. Hieronym. praef. in XII. Prophet. *nardum pisticum: id est unguentum fidelissimum.* — **27.** A second hand has repeated the gloss, *narrat: nuntiat*, at the bottom of page. — **28.** Cf. De Vit; l. vita. — **32.** l. amicitiae. — **34.** l. iniuria. — **35.** Two glosses confused, Necromanticus: evocator umbrarum, and Necromantia: mortuorum divinatio. — **36.** l. nenias. — **37.** l. nequam. — **40.** l. novilunium, Kalendae. — **41.** l. neophytus. — **47.** l. sed et. — **48.** l. naevum. — **54.** Cf. **35**; l. anima . . mortuorum. — **57.** ? perhaps for nefaria: crudelis, inloquenda; cf. *indicendus* ἄλεκτος, Gloss. Philox. — **58.** l. nequaquam: nullo modo. — **61.** l. prodigus. — **62.** l. neoterici. — **67.** l. neverant: filaverant. — **71.** l. necando. — **72.** Cf. Festus, 177, 7, *Nictare et oculorum et aliorum membrorum nisu saepe aliquid conari*, etc.; Nonius, 440, 26, . . . *nictare oculorum significantiam esse decreverint; oculorum* may be due to some such statement. It is of course easy to amend to *oculos frequenter aperire* (*et claudere*). — **73.** l. nycticorax. — **75.** l. scorpius; cf. Paul. 164; Fest. 165, and Placid. 70, 13. — **76.** l. nivarius: splendidus; cf. Prod. 427. — **77.** Cf. Prod. 16, and Festus, 177 a, 16; l. nictit canis, etc. — **78.** l. vento. — **82.** l. nymphaticus: arrepticius; cf. lymphaticus. — **83.** l. candidus. — **86.** See above, p. 130. — **89.** l. morio; cf. Prod. 19, for numerous similar glosses. — **91.** = nempe. — **94.** l. dubio. — **95.** l. *nictura: gannitura; cf. **77**, or perhaps natura: genitura. — **97.** l. Nilicola. — **98.** l. nympha; cf. Amplon. 355, 22, *nimpha virga caelestis vel numen aequa* (l. aqua). — **99.** l. nītens: incumbens; nĭtens: splendidus. — **100.** l. nitelae. — **104.** l. nympha. — **107.** l. nosocomium. — **110.** Cf. Verg. Aen. III. 268. — **111.** l. adulterio. — **113.** l. nihilo setius: nihilo minus. — **115.** l. noctiluca. — **118.** l. tergiversator. — **119.** l. umida (the *u* is corrected from *o* in MS.); cf. Verg. Aen. II. 8. — **120.** l. putativum; cf. De Vit. — **121.** l. nomenculator; cf. Prod. 404. — **128.** l. maiestas. — **133.** Cf. above, p. 130; l. nuscitiosus . . vespere. — **136.** l. nummularius: praerogator may perhaps be kept, as *praerogare* is used in the sense of pay beforehand; otherwise

read PROROGATOR. — **137**. Cf. Amplon. 354, 80, *nummisca, nummi percussura calatae;* l. percussura (referring to the stamp), denarius; so Bod. *nummisma: figura quae in nummo fit vel nummi percussura id est denarium alii solidum dicunt.* — **140**. l. noverca.

O.

8. l. oppositiones; cf. Serv. Georg. IV. 422, Obice; obiectione. — **10**. l. obesus. — **11**. l. scrupulum. — **12** and **13** = **7**, added by second hand; cf. Mon. 6210, *obicem oppositionem obices repagule balbe* = repagula valvae. — **14**. l. obit. — **19**. l. ovans. — **20**. l. oppugnat. — **21**. l. opponit. — **24**. l. oblimat, in this sense apparently connected with *limare, lima,* in sense of clean off. Cf. Acron. Hor. S. I. 2, 62, *Oblimare, delere, consumere, tractum a lima qua fabri utuntur, aut certe a limo ut sit obducere, ut dicimus quaedam limo obducta, periise;* see Hild. O 21. — **26**. offerta, late Latin; cf. *offertor* and *offertorium.* — **27**. l. obliterata. — **30**. l. obnoxius, so **31** and **32**, humilis; cf. Hild. O 30. — **33**. l. obnubit: obtegit; cf. Paul. 184, 4, obnubit, caput operit. — **34**. l. obnuberat; cf. Hild. O 31. — **37**. l. obstipum. — **38**. l. obstupida; cf. Plaut. Mil. 1254, *Quid astitisti obstupida?* — **39**. l. obsoletatus: inquinatus. — **41**. l. deprecat(ur). — **42**. l. desperatus. — **43**. l. obsoletus: sordidus. — **44**. l. obsecundat. — **45**. l. foedissimum. — **48**. l. praecisa. — **49**. l. obtorpuit: infrigidavit. — **50**. l. obtensus: obcaecatus. — **51**. l. obtendentes. — **53**. l. immobilis. — **56**. l. obnitens. — **57**. l. obnubit, here glossed as if *obnupsit.* — **59**. l. obnubit: operit; cf. **33**. — **60**. l. obnuptus. — **61**. ? Perhaps two glosses confused, obruto: oblito, and obruito: obterito. — **63**. l. impedit. — **65**. ? Cf. De Vit; Mai. VI. 536, *Obisallagis: Marsusus* (Mai. adnotat " Isid. *Obsillas: marsus* pro *psillus: marsus* "); see Aulus Gellius, XVI. 11, 1, for the connection between Psylli and Marsi. Amplon. 357, 116, *Obsillages: marsus.* A clue to the correct reading may perhaps be found in Isid. Or. IX. 2, 88, *Marsos autem Graeci Uscos vocant* quasi ὀφιούχους *quod multos serpentes habent.* See also Gloss. Lat. Gr. Marsae: ἀσπιδοθήραι, ὀφιοδιώκται. Professor Gildersleeve has suggested ΟΦΙΟΜΑΧΟΣ, Φ being read as Ψ and M as ΛΛ. — **87**. l. occuluit. — **88**. Cf. **91**. — **89**. l. HODOEPORICON; cf. Vita Persii, et ὁδοιπορικῶν librum unum. — **94**. l. tabani. — **95**. l. ministerium. — **96**. Cf. Festus, 242, b. 26, *Antiqui autem offam vocabant abscisum globi forma, ut manu glomeratam pultem;* l. rotunda. — **97**. Cf. Hild. O 93, and Beck, p. 64, *inficit* qui colorem mutat quasi qui lanam tingit, *officit* qui *nocet.* But cf. Plac. 73, 3, *offuciarum, dictum ab offucando quod est 'furtim colorare.'* Hence perhaps there is some confusion with a gloss, *offucat: colorat, tinguit.* — **100**. l. olitores. — **103**. l. oblimat; cf. **24**. — **104**. l. cycni; cf. **106**. — **105**. OLITANA formed from *olim.* — **109**. l. holographum. — **110**. l. homilia. — **111**. Formed like magnopere; see above, p. 134. — **112**. l. omina; cf. **117**. — **114**. l. homousion. — **115**. l. homoeusion; cf. Isid. Or. VII. 2, 14, *Omousios* Patri *ab unitate substantiae* appellatur. Substantia enim vel essentia Graece οὐσία dicitur ὁμῶς unum. Utrumque ergo coniunctum sonat *una substantia,* and 16, *Omoeusios similis substantiae,* etc.; l. substantiae. — **116**. Cf. De Vit, and Hild. O 108. — **117**. Cf. Mai. VII. 571, *omentrum: auguria maiora.* — **119**. l. onustum: gravosum; cf. **124**, and Loewe G. N. 166. — **120**. l. onyx. — **121**. l. Onesiphorus: lucrum ferens; cf. Hild. O 113. — **121**. l. onocrótalus . . . faciem gerit . . . facies . . . crotalus = κροτάλος. — **123**. l. onycinum. — **127**. l. operae pretium. — **128**. l. opperiens; *p* has been added above the line by second hand (Kaegi). — **129**. l. oppidum . . muris. — **131**. See above, p. 130, and Serv. Aen. IX. 605, ... alii *oppidum* dici *ab oppositione murorum;* vel quod hominibus locus esset oppletus; vel quod *opes illo munitionis gratia congestae sunt.* — **133**. l. velat. — **134**. l. factor. — **135**. l. opitulator: adiuvator. — **136**. l. oppido . . . opportune. — **139**. Cf. Loewe G. N. 168. — **143**. l. arbitrium. — **148**. l. oppessulatum . clave. — **149**. l. opprobrium. — **151**. Cf. OPITULOR. — **153**. l. patre non vivo . . . mortem; cf. Prod. 396. — **154**. l. opiparum; cf. Paul. 188, 8, *Opiparum magnarum copiarum apparatum.* **156**. l. ophites. — **158**. l. opportunus. — **159**. l. dives. — **163**. l. orditur. — **166**. l. loquens. — **167**. l. orama (horama). — **168**. l. vestigia . . in strata. — **170**. l. coepta. — **174**. Confusion of ora: vultus and ora: finis, extrema (pars) vestis. — **176**. Cf. **169** and **174**; possibly = Gk. ὅροι; cf. Isid. Or. XIX. 24, 20, *Fimbriae vocatae sunt orae vesti-*

mentorum, hoc est fines; ex Graeco vocabulum trahunt, Graeci enim terminum ὅρον *vocant.* — **177.** l. mysteria. — **178.** l. Ortygia: Delos; cf. Serv. Aen. III. 72. — **179.** l. ortygometrum (a), with confusion of gender (cf. **181**), coturnix. — **180.** Cf. Isid. Or. X. 195, *Orthodoxus vir, rectae gloriae.* — **181.** l. horoscopus. — **182.** Cf. Isid. Or. VI. 19, 23, *dicitur Hebraice osanna, quod interpretatur salvifica*, etc.; l. salvum. — **188.** orii for oris; cf. **191.** — **193.** l. oscines. — **194.** l. si fiat; cf. Hild. O 172, and Loewe G. N. 168.

P.

1. l. paciscit. — **2.** l. pagus: collegium; cf. De Vit and PAGUS. — **5.** l. phalanx. — **6.** l. coniventia. — **7.** Neither *Pactorium* nor *Plantatorium* appear to be found outside of glosses. *Plantarium* is common. — **8.** So Amplon; cf. De Vit; Mai. VI. 538, *paganicus, ut* (vir?) *occultus;* also VII. 572, *paganicius.* — **9.** ? Cf. **12.** Perhaps for paginat (Cf. Du Cange): dissertat or disserit; In XI. century French, Saint Alexis 42 a, we find desirret = desiderat, so that desiterat may be an instance of 'umgekehrte Schreibung.' — **10.** aliquo . . . alienos. — **11.** ? Cf. Hild. P 6, Pagi: memoriae sine idolis. — **14.** l. palaestra. — **16.** In reality two glosses, paliurus: spina vel genus cardui spinosi, and palathe: massa caricarum; cf. Serv. Ecl. V. 39, *Carduus; spinae genus. Paliurus herba asperrima et spinosa* [*vel ut quidam volunt, spina alba*]; cf. Hild. P 11 and 15. — **18.** — De Vit cites *Palanteum: murus fastigium*, Gloss MS.; Gloss. Isid. p. 690, Vulc. *Palteum: murum vel fastigium* (so Epin. 19, A 18; Mai. VI. 558), and *Palteum; manu vel vestigium*, Gloss Isid. p. 689. (Vulcan. al. *Pluteum*). The reading *Palanteum* might point to *palatium* as the original of *paltium;* cf. Isid. Or. XV. 3, 5, and Paul. 220, 5; but there is evidently a confusion of two glosses, palatum (in sense of *taste*): fastidium, and possibly pluteum: murum as suggested by Graevius; but cf. PALATIO and PALATUS = palis munitus. — **20.** l. Pales . . . quam. — **21.** l. in diversa; cf. De Vit. — **22.** Two glosses confused, Pallas: Minerva; and palla: amictus muliebris. — **23.** l. palmula. *navis* by mistake for *remi;* cf. Servius Aen. V. 163, *palmula extrema pars remi in modum palmae protenta;* cf. Paul. 220, 9. — **25.** l. palam. — **28.** Cf. Epin. 19 A, 19, *pallentes: gaudentes*, and Hild. P 10, who reads *palantes* in sense of *tripudiantes*, whence *gaudentes;* but this is very doubtful. — **30.** l. paludamenta: ornamenta militum unde hi qui in provinciam proficiscuntur paludati vocantur; cf. Paul. 252, 1, *paludati armati, ornati. Omnia enim militaria ornamenta paludamenta dicebant.* — **33.** Cf. Prod. 419; neither of these words occurs; cf. BUCCELLARIUS. — **34.** l. parcus. — **35.** l. parasitus . . . iniuriam. — **36.** Cf. Bod. *parbata cupidus;* other glosses have *parabata* = παραβάτης; cf. Hild. P 61 n. — **39.** l. paraclytum. — **42.** Cf. PARIENTIA, for PARENTIA; the verbs *pario* and *pareo* seem to have been confused so that *a pariendo* was probably written for *a parendo.* — **44.** l. palpitat. — **46.** l. paralipomenon: reliquum. — **48.** l. parabola. — **49.** Cf. PARASCEUE. — **51.** l. quaesita. — **54.** l. pharmacopola . . venditor. **55.** l. paganorum. — **56.** ? Cf. PARTICUS; l. negotiator. — **57.** l. Iunonem, ... Minervam . . . de malo. — **58.** l. Parius: lapis candidus. — **60.** l. parentes suos. — **61.** l. paroecia; cf. **65.** As πάροικος = Lat. inquilinus, so παροικία = incolatus. — **63.** l. gloriam; cf. Hild. P 35. — **64.** l. exigue. — **65.** PAROCHIA is a common corruption for PAROECIA; l. dei domus; cf. Eucher. Instruct. II. 15, Paroecia: adiacens domus, scilicet Dei; Ball. *parrochia adiacens domus aut diocesis.* — **66.** l. ludos. — **67.** l. Pancra; cf. Prod. 339 f. — **69.** l. retia; cf. PANTHER and PANTHERA. Varro L. L. V. 100, *A quo etiam et rete quoddam panther et leaena.* — **70.** l. pannucium; cf. Isid. Or. XIX. 22, 24, *Pannucia nuncupata quod sit diversis pannis obsita.* — **72.** l. pandectes. — **74.** l. incubus. — **75.** l. poeniceum. — **76.** l. panegyrici: adulatores. — **77.** Cf. Prod. 388, l. Pansa: qui pedibus in diversa tendentibus ambulat. — **78.** l. pastophorium. — **83.** l. phiala. — **85.** l. pathologia. — **88.** Cf. Bod. *patago*, and Paul. 221, 3, *Patagus morbi genus*, and Plautus, cited by Macrob. Sat. V. 19, *mecum habet patagus morbus aes;* see also De Vit. — **90.** l. patruelis. — **92.** l. Paulus; cf. Isid. Or. VII. 9, 8, *Paulus, quod interpretatur mirabilis sive electus.* — **94.** l. placido. — **97.** l. Plastographis. — **98.** Cf. Prod. 387. — **100.** l. placat. — **102.** l. peculium. — **103.** l. plantaria: horti. — **106.** Cf. Hild. P 244, *Placenta,*

dulcia vel dilicias. — **108.** l. plebicola. — **111.** l. plebem scitat: plebem adloquitur; cf. Prod. 353. — **112.** l. Pleiades. — **114.** l. plerumque (with Bod.) aliquotiens. — **115.** l. plebeii . . hominis. — **118.** l. fallacia. — **122.** l. privilegium . . debetur . . . publica. — **123.** Something is omitted after *deus;* cf. Velleius II. 57, cum plurima *praesagia* . . . . *Dei* immortales futuri *obtulissent* periculi; Bod. *praesagium*: *praescium* divinum vel divinatio raticinatio vel signum quod *ante dicitur* et *post venit.* — **125.** l. privignus; cf. De Vit under *Prevignus.* — **126.** l. praetereo. — **129.** l. praelibavimus . . contulimus. — **130.** l. antecedit. — **135.** l. praepropere . . festinanter. — **136.** l. praestitutum. — **138.** l. praepes: praecursor, velox. — **144.** l. praelibando. — **145.** l. transnavigo. — **146.** l. praecessant (not given in Lexx.) saepe, which is not elsewhere found in the glossary; but cf. Bod. *praessant premunt exprimunt.* — **150.** l. privignus; cf. **125.** — **151.** l. praelocutio. — **154.** l. cunctis praepositus. — **155.** l. praediti. — **159.** l. praevius; cf. Bod. *praevius ducator antecedens precurrens, precedens.* — **160.** l. praes: fideiussor. — **162.** l. praeproperum . . faciendum. — **163.** l. prelum. — **165.** l. praematurus. — **167.** ? l. parvulus; cf. Hild. M 162, *modicus praevalus*, hence *praelus. prẹlus* as here. — **168.** l. praeripit. — **173.** l. praepollet. — **174.** l. praecoqua. — **176.** l. praesidiarius. — **179.** l. praetextatus. — **183.** l. pectit. — **185.** l. peculator . . pecuniam publicam. — **186.** *pecuarius* in this sense is well known, l. Pecudarius with Ambr. B 31; cf. Loewe G. N. 168. **188** and **189**. l. paedor and paedora; cf. Loewe G. N. 156. — **190.** l. eruditor. — **192.** l. fraudem. — **193.** l. paelex, or perhaps PALLACA. — **195.** l. promuntorium. — **196.** l. perversa loquens. — **197.** Cf. Amplon. 365, 428, *Pesago, homo iacularis;* Hild P 107 n. gives *pesago h. iacularis*, and *pegano: homo iacularis.* From this latter emend παίγνιος = *pegnios* = *peginos.* — **198.** l. pecoratus: abundans; cf. Loewe G. N. 168. — **199.** l. peierat; cf. Loewe G. N. 225. — **200.** pelagu is perhaps for pelagia, but the interpretation is like Isid. Or. XIX. 1, 24, *Pontonium navigium fluminale tardum et grave*, and 27, *Trabariae amnicae naves quae ex singulis trabibus cavantur, quae alio nomine litorariae dicuntur.* — **201.** l. pecora. — **202.** Cf. Hild. P 103, and Loewe G. N. 156, who compares Lucan II. 72 sq. *Mox vincula ferri exedere senem longusque in carcere paedor*, and thinks *pedatum carcerem* belong together, the interpretation having been lost. — **203.** ? Cf. Mai. VI. 537, and VII. 572, *Paeditatus: propagatio filiorum ac nepotum;* perhaps Greek, cf. παιδοτόκος, παιδοτοκία; Bod. *peditatus numerus peditum vel propagatio filiorum aut nepotum.* — **204.** l. paedore: foetore. — **205.** l. pellicit. — **206.** l. pellacem . . mendacem. — **207.** pellector, only found in glosses. — **208.** l. paelex . . quae; cf. Hild. P 110, and Paul. 222, 3, *Pellices nunc quidem appellantur alienis succumbentes non solum feminae sed etiam mares. Antiqui proprie eam pellicem nominabant quae uxorem habenti nubebat.* — **209.** ? perlusit. — **210.** l. pelta . . Amazonizum. — **211.** l. promptuarium. — **212.** l. penates. — **213.** l. pendulus: elevatus. — **215.** l. paenula. — **216.** l. faveo. — **220.** l. pendere. — **221.** l. inrumpit. — **222.** l. paene. — **223.** l. peritomen. — **224.** l. poeniceo. — **225.** l. paene. — **226.** l. pretii persolutio. — **227.** l. pinace or pinax; cf. Hild. P 115. — **228.** l. impulit. — **230.** l. melo. — **232.** l. Minervae. — **233.** l. melones. — **235.** l. praepetes. — **237.** l. permulcet. — **239.** l. peribolum; the latter part of this gloss is obscure, and probably due to some confusion; cf. Hild. P 164. — **240.** percenset. — **241.** l. perculit . . adegit. — **243.** l. timidus. — **244.** l. perquirit. — **250.** l. perlabitur; cf. Verg. Aen. I. 147. — **251.** Cf. Hild. P 172–174. — **252.** Perhaps for pervulgatum; Ball. *permulgatus.* — **254.** Cf. Lagarde Onom. Sacra p. 70, *Petrus agnoscens sive dissolvens.* — **256.** l. peragit. — **257.** l. PERPESSICIUS. — **258.** l. perpes: perpetuus; so Bod. — **260.** l. perpendit: perpensat. — **263.** l. pos cras. — **268.** l. perculit, . . prostravit, with Bod.; cf. **241.** — **270.** Cf. other similar glosses in De Vit. Pergenuare is not given by Lexx. — **271.** persum = pessum. — **272.** l. perimit. — **273.** l. personavit, publicatus. — **277.** l. PERIPSEMA. — **278.** perduellis seems to be glossed as if abl. pl. from perduellus. Cf. Hild. P 152, *Perduelles: hostes.* — **279.** Cf. Verg. Aen. VI. 435. — **286.** l. periculum. — **287.** l. per ironiam: per inrisionem. — **291.** l. periscelides. — **292.** l. percellit. — **293.** l. perspicacem: vigilantiorem; so Bod. — **295.** ? l. pervium; cf. Hild. P 205, *pervium, quod pertransitus, id est planum.* — **296.** l. purgamentum. — **299.** l. pervigilans. — **300.** l. pertaesum: taediosum permolestum. — **303.** l. tegmina accubitus; cf. Prod. 347. — **304.** l. pessuma = pessumdata, Hild. P 213, Amplon. 367, 96 and 364, 412, *pe-*

ruma; confracta, decrepita. — **305.** l. perplexum. — **306.** l. persentiscat: ex toto. — **307.** l. perplexa: perplicata (?); cf. Lucr. II. 394, but see Bod. Perplexus: perligatus involutus impeditus, Hild. P 186, *perplexa, perligata*, who cites Paul. 231, 8, *plexa colligata unde perplexa*, by which analogy *perligata* may be defended. — **309.** l. perperam. — **310.** Cf. Plac. 74, 8, persollas: personas, and Prod. 261 (Plaut. Curc. 192). — **312.** l. pessulum: clustellum (not given in Lexx.). — **315.** l. aurea . . tenuissima. — **320.** l. battuunt, confirmant. — **321.** ? — **322.** l. pipat: conviciatur, quiritat ut passer, with Loewe G. N. 219, who gives *viciatus*, as reading of San Gallensis, but Kaegi reads vicitatus. — **323.** l. phlegma. — **325.** l. peniculum: spongia. — **326.** l. pyxides. — **328.** Cf. Isid. Or. VII. 9, 16, *Philippus os lampadarum, vel os manuum.* — **329.** l. pirata. — **331.** l. placationes. — **332.** l. hasta Romana. — **333.** l. PILARIUM. — **334.** l. fastigium. — **335.** l. adhuc . . . ardet. — **336.** l. bestiae marinae. — **337.** l. peccato. — **338.** l. PICTI . . et qui tegunt se corio crudo. — **339.** l. dantur. — **341.** l. primulum? or primipilum? cf. Bod. primolus: primorum princeps. — **344.** cf. PRIMORIS. — **347.** l. pridie. — **348.** l. pospridie: hodie. — **349.** So Hild. P 381, but not found in use. — **350.** l. privilegium. — **353.** l. primigenus; cf. Lucr. II. 1106. — **356.** l. caballarius . . . virgis; cf. De Vit. — **357.** l. herbae . . . lavantur = Gr. πόα. — **359.** l. PODERES. — **360.** l. pullulat. — **364.** l. pollet: crescit. — **366.** Cf. De Vit and Mai. VI. 540, *Politen; ubi cadavera ponuntur: Graecum est*, where Mai. notes, "Isid. *polingon*. Dic autem *polyandrion*." Very likely, however, there is some connection with *pollinctus*, see **363.** — **368.** l. penates. — **370.** l. concava. — **377.** l. postulaticius; cf. Hild. P 303, and ROGATARIUS. — **378.** l. carminis. — **381.** l. PTOCHOTROPHEUM. — **382.** l. ponit. — **389.** l. podex . . . id est anum vel culum. facedenica = φαγεδαινικός, which in some inexplicable way has crept into this gloss. — **394.** l. captivitatem . . . iura quae amiserat. — **396.** l. muris; cf. Hild. P 277, and Varro L. L. V. 143, *pomerium locus iuxta muros.* — **399.** Confusion of two glosses, *potior: fruor;* and *potior: potentior.* — **402.** l. bibitor. — **404.** l. probe. — **409.** l. probata. — **411.** for other similar glosses see Prod. 397. — **413.** prolongum is perhaps to be retained; cf. PROLONGUS, or it may stand for *praelongum* or *perlongum.* — **415.** Cf. Prod. 395. — **419.** l. subiti. — **420.** l. primates, nobiles. — **421.** l. proclina. — **422.** ? — **424.** l. mali pronuntia for praenuntia. — **427.** l. polluta. — **429.** l. profatur. — **435.** l. prolepsis . . . postea; cf. Pompeii Commentum; Keil V. 301, *prolempsis est praeoccupatio: sic potest latine dici, prolempsis est praeoccupatio rei futurae, pleraque quae postea fiunt sic dicimus nos, quasi antea facta sint.* — **438.** l. publicatum. — **439.** l. procacia . . . audacia. — **440.** l. dubio. — **441.** l. differt. — **442.** l. prodigus and prodigit: devorat, or perhaps devorator. — **446.** Cf. Mai. VII. 574, *profani: alieni a sacrificiis*, the latter part of this gloss may therefore be a corruption of *profani: alieni a fano;* cf. Isid. Or. X. 224, *profanus quasi porro a fano*, but a simpler emendation is *alieno sono.* — **454.** l. restituere. — **458.** l. paranympha: cf. Isid. Or. IX. 7, 8. — **462.** l. propinquius. — **464.** l. promatertera. — **465.** Cf. **468**, *inclinus* seems to be a collateral form of *inclinis.* — **466.** Perhaps for *propiorem*, but see **478.** — **467.** l. propalam. — **470.** Cf. PRONEFAS and Hild. P 465. — **472.** l. proaviae. — **473.** l. pro re. — **474.** l. festinat. — **476.** Prorigo is not found in Lexx. Possibly a corruption of *praerogatur: ante erogatur.* — **480.** l. prora. — **482.** l. prospectans. — **482.** l. prosequitur. — **486.** l. iram. — **488.** l. protelat. — **490.** l. provehor. — **491.** l. prostituunt. — **492.** l. prunas. — **493.** l. proselytus. — **497.** l. protoplastum. — **498.** l. superbus. — **502.** l. occidatur. — **503.** l. poplites . . . suffragines. — **504.** l. puberat . . . incrementat; cf. Hild. P 549. — **505.** l. iuvenes. — **508.** l. genae barbam emittentes. — **510.** l. pubescit. — **513.** Cf. PUGILLAR. — **514.** l. pugnum. — **515.** l. ubi statuae stant. — **516.** l. pullulat . . . oritur. — **517.** l. nascitur. — **518.** l. partu puerum. — **525.** Cf. **517** and **518.**

Q.

4. Nothing more can be read in MS. l. confractum; cf. Vulg. Matth. 12, 20, *Arundinem quassatam non confringet.* — **6.** Cf. QUANTOCIUS, and Hild. Q 14. — **7.** l. quantulum. — **6.** l. quadrifidum: quadrifarie. — **12.** l. querela. — **14.** l. acquisitio. — **15.** l. quaestio. — **16.** l. questus. — **17.** l. ad rem quaerendam. — **18.** l. querulus . . accusator. — **19.** l. potuerint. — **20.** l. quae quaestu corporis; cf. De Vit. According to Kaegi there

is a slight rasura in MS. between *co* and *corporis*. — **22.** l. quempiam. — **24.** l. possum. — **26.** l. quempiam. — **27.** Cf. Mai. VI. 542, *Queror: iniurias vindico* (? *indico*) *vel querellam depono*. — **28.** l. pecuniam publicam praerogat. — **29.** l. queunt. — **30.** Confusion of two glosses, quivi: potui and quievi: consensi. — **33.** l. etiam. — **36.** l. quietem. — **37.** Cf. Mai. VI. 543, *Quis quantus: quam magnus*. — **38.** l. quin etiam: si etiam magis ac magis. — **39.** l. struit. — **43.** = quid ni in **41**, or perhaps for quippini; l. firmandi. — **48.** l. quaesitor. — **55.** l. potestate. — **59.** l. denuo. — **65.** l. quomodo.

R.

4. Cf. RHAMNUS; l. herbae spinosae. — **5.** l. botryonem. — **8.** Cf. Prod. 346 and G. N. 142 for forms *randum, rabamini rabar*. — **12.** l. rabulam; cf. Paul. 272, 9, *Rabula* dicitur in multis intentus negotiis paratusque ad radendum quid auferendumque vel quia est in negotiis agendis acrior quasi *rabiosus*, and Nonius 60, 12, where *rabulam* is quoted from Cic. Orator 15. —**14.** l. invidia dolor; cf. Bod. *rancor invidia dolor vel odium*. — **15.** Cf. Isid. Or. VII. 5, 13, *Raphael* interpretatur *curatio vel medicina Dei*. Ubicunque enim curandi et medendi opus necessarium est; hic *angelus a Deo* mittitur inde et *medicina Dei* vocatur. — **18.** ramen, collateral form of ramentum; cf. Loewe G. N. 169; l. specie. — **19** l. rapidus . . celer; the form *randus* is perhaps due to some confusion with **8**; cf. Amplon. 372, 105, *raidum: arbitrandum*. — **21.** l. Romulo. — **22.** = ῥακά, Matthew V. 22. — **24.** For clausa, cf. Isid. Or. IV. 7, 14, *Raucedo* amputatio vocis. Haec et arteriasis vocatur, eo quod *raucam* vocem *et clausam* reddat ab arteriarum iniuria; see Festus 282, Paulus 283. — **25.** l. rebitere; cf. Loewe G. N. 199. — **27.** l. redimitus. — **29.** l. redimicula. — **30.** l. a vetustate. — **32.** l. redhibet. — **36.** l. redhibitionem. — **41.** Cf. REDUX. — **43.** l. aperit; cf. Serv. Aen. I. 358, Recludit; seclusos aperit, ostendit. — **44.** l. recenset . . recognoscit. — **45.** l. adcumbit. — **47.** l. rica: mitrae genus; but the spelling *reica* may be etymological; cf. Varro L. L. V. 132, *ab reiciendo ricinium dictum*. Cf. Nonius 629, 17, *Rica, est quod nos sudarium dicimus*, and Festus 289 b, 19, *Rica est vestimentum quadratum fimbriatum pur-pureum, quo Flaminicae pro* palliolo mitrave *utebantur*, etc. Paulus has not preserved *mitra* in the Epitome. In Varro L. L. V. 130, *mitra* is discussed immediately after *rica*. — **49.** l. repletum. — **50.** l. refertus. — **51.** l. referserunt. — **52.** Cf. REFOCILLO. — **63.** l. gubernatio; cf. Festus 278 b, 3, *Regimen pro regimento usurpant poetae;* Ennius, L. XVI. 'Primus senex bradyn † (*ratus*, Bergk) in *regimen* bellique peritus.' — **73.** Cf. above, p. 130. — **76.** Cf. Loewe G. N. 169; l. remulcant (preserved in Sp. remolcar), used by Sisenna, quoted by Nonius, 57, 20, where Quicherat wrongly reads *remulco trahere*. See Paul. 279, 1, *Remulco* est, quum *scaphae remis navis magna trahitur*. l. scapha navem ducunt. — **77.** l. resplendet. — **78.** l. remex: *remigator, formed regularly from *remigo;* cf. Loewe G. N. 169. — **80.** l. renitentibus. — **81.** renidet; the explanation *redolet* is perhaps due to some association with *nidor;* cf. Hild. R 96. — **82.** l. arbitrabare. — **84.** l. arbitrabamini. — **87.** l. redit ad sua(m patriam). — **88.** l. repedat; cf. Prod. 335. — **91.** l. repagula: receptacula. — **92.** l. repperit. — **94.** l. subitaneus, due to confusion of two glosses; cf. **89**, and Bod. *repens subito trahens enatans vel serpens*. — **96.** l. otiosi; cf. Serv. Aen. I. 722. — **97.** Cf. **88.** — **100.** l. otiosus. — **102.** l. integrum. — **103.** l. resciscere: cognoscere. — **105.** l. resiliunt; cf. **108**. Compare RESULTATOR, one who resists or denies, and Plac. 78, 25, *Resultatio* id est *reluctatio*, quae renititur et contra tendit, etc. — **113.** Cf. Hild. R 95, *Rendis, requies ociosa*. Hild. proposes to read *residia: requies* or *reses: quies, otiosa*, taking *quies* as an adj. See also Amplon. 371, 80, *resides, requiescendo otiosus*. — **114.** Cf. Hild. R 124, *Rescit, scit, comperit, cognoscit;* l. rescit: discit. *condisire* perhaps belongs to a gloss *rescire: condiscere*. — **116.** l. resipiscit, but the form *reticescit* had doubtless some other gloss. Cf. *Conticescit: reticescit*, Not. Tir. p. 90, and Georges under *reticesco*. — **120.** l. recubans. — **121.** l. replicat. — **123.** l. repercutit. — **125.** l. RHEUMA. — **129.** l. pos tergum. — **130.** Cf. **97.** — **133.** l. repedo; cf. **130.** — **135.** l. revecta. — **138.** l. rigebant; cf. Verg. Aen. V. 405. — **139.** l. rimae. — **140.** Cf. Nonius 165, 4, *Ringitur, irascitur*. Terentius in Phormione [II. 2, 27]. — **142.** Cf. RIMO and SCRUTO. — **143.** Cf. Nonius 32, 21, *Rivales dicti sunt quasi in unum amorem derivantes*. Teren-

tius in Eunucho [II. 3, 62]. l. ad unum rivum currentes. — **146.** l. riget: friget; cf. Verg. Aen. IV. 251, where Servius, *Riget*, aut *frigida est, aut recta est* unde et *rigorem* dicimus, *directionem*. Inde est (Georg. III. 363) vestesque *rigescunt*, et (Aen. VII. 447) *Diriguere* oculi. — **147.** ? Cf. previous note. — **148.** l. iuncturis tabularum. — **151.** l. rhinoceron. — **154.** l. rubus. — **157.** ? l. robigo . . gelum; aerugo; see **172.** — **158.** l. pyram. **161.** = ῥώμη, etymological explanation of Roma; cf. Paul. 267, 5, *Romulus et Remus a virtute, hoc est robore appellati sunt.* — **163.** l. Romulidae; cf. Serv. Aen. VI. 21. — **164.** l. rostrum pecorum est; os hominum = Differentia. — **166.** l. rosea; cf. Serv. Aen. II. 593, *roseo; pulchro. Perpetuum epitheton Veneris.* — **168.** Perhaps for *rorarius* (notice that *roscidum* precedes); cf. Paul. 264, 8, *Rorarios* milites vocabant qui levi armatura *primi proelium committebant;* Nonius 552, 31, who cites two examples of the sing. from Lucilius. But there is some confusion with *runa;* cf. Paul. 263, 1, *Runa genus teli* significat; Ennius, "*Runata* recedit," id est *pilata*. Why not, therefore, *Runanus* = *pilanus?* Cf. **178** and Papias, *Runa: pugna.* Ugut. *Runa stipula vel pugna; unde runatus praeliatus.* — **169.** l. flavo, or rubro may = rubrum. — **172.** Cf. **157.** MS. has gelum ū; l. aerugo. — **178.** l. alii pugna. Confusion with *runa;* see **168.** — **181.** Cf. Serv. Aen. VII. 16, *ruditus* autem proprie est *clamor asinorum*, sicut grunnitus porcorum. — **182.** l. RUMIGERULUS: portitor rumoris. — **183.** l. RHOMPHAEA. — **186.** For *rupra* read *rupia*, the pure Lat. form of rhomphaea, **183**; cf. Amplon. 373, 71, *Rupia ex utraque parte acuta;* so Isid. Or. XVIII. 6, 3. — **188.** l. denuo. — **189.** The Lexx. cite only Ov. Met. VII. 765, for rurigena. — **190.** l. pagus. — **192.** *vi et fama* is a corruption of βοήθημα used as in late Greek for medicine. Compare V **151**, *vuetema: adiutoria. rustu* is for *rustum*, and goes back to Verrius Flaccus; cf. Fest. 265 a, 34, *Rustum ex* (*? sentex*) *rubus.* De Vit cites Gloss. Med. MS. *Rusti* et *sentix* idem nascitur ubique in campis et sepibus secundum librum antiquum *de simplici medicina.* Mai. VII. 578, *Rusti:* arbores duri singulari numero. Mai. VI. 543, *Rusticum lignum:* foliis spinosum. For the close connection of *rubus* and *sentix* cf. Isid. Or. XVII. 7, 59, *Rhamnus* genus est *rubi*, quam vulgo *senticem* ursinam appellant. — **193.** inculti is added by the same hand as **200.** — **195** and **196.** The same gloss repeated. De Vit cites Gloss. Gr. Lat. Πτῶσις ἐπὶ οἰκοδομῆς: *ruina rues*, Gloss. Isid. *rues, ruina*, and compares *lues.* — **197.** ? So Ball. Festus 262 b, 31, has a long and very corrupt note on *Ruscum*, in the course of which he says, *Non dissimile iunco.* Cf. Mai. VIII. 509, *Ruscus: spina longa*, and De Vit under *ruscidum.* — **198.** l. fulget.

S.

3. l. cupiditas; cf. Serv. Aen. III. 57, *Sacra, execrabilis.* — **5.** l. saviat = suaviat. Nonius 474, 10 and 12, gives two examples of active forms. — **8.** l. lutosa; cf. Hild. S 17. — **6.** Cf. SALPICTA, SALPINCTA. — **11.** l. sagax . . ad; cf. Prod. 94, *satax* (= sagax): *sapiens, investigator.* — **12.** l. saccella; cf. Paul. 319, 4, *Sacella dicunt loca diis sacrata sine tecto.* — **14.** l. quo vacuae naves stabiliuntur; cf. Hild. S 2, and Scholia Bernensia ad. Verg. Georg. IV. 195, *Saburram, harenam Saburra dicitur qua naves onerantur ad aequum opus*, etc. — **15.** l. urbanitas. — **17.** *salvus* is probably the word erased. — **19.** Mai. VI. 544, has *locus cultosa*, which Hild. S 17 n. emends to *lutosa;* cf. **8.** Bod. has lutosa. — **20.** l. incultus. — **23.** Cf. SAMBUCISTRIA; cf. Mai. VI. 544, *Sambucistri; quae canunt cithara rustica.* — **24.** l. saltator; cf. Hild. S 27, *Sambucus, histrio, saltator.* — **25.** l. SAMBUCAE; cf. Paul. 324, 7. — **28.** l. cultum. — **29.** l. diiudicavit. — **31.** Cf. Paul. 324, 6, l. auripigmentum, mundus in sense of cosmetic; cf. Isid. Or. XIX. 17, 12, *Arsenicum* quod Latini ob colorem *auripigmentum* vocant colligitur in Ponto ex auraria materia ubi etiam *Sandaracha*, etc. — **34.** ? Cf. Amplon. 379, 353, *Sabapapa: unum quasi dulco acidum;* and 379, 14, *Sabapappa, vinum quasi dulciatum;* Mai. VI. 544, *Sappapapa acidum vinum* (Mai. emends *vappa*). Probably a vulgar compound of sapa + vappa. — **35.** Cf. Gloss. Isid. *Sarga; non idoneus cuiuslibet artis professor* and several similar glosses cited by De Vit, l. cuiuslibet artis. Du Cange cites from Hincmarus Laudun. Episc. tom. 2, p. 336, Nec recognosco me alicui parentum meorum velut *Sargae* de-

disse beneficium; compare also ARGA in Du Cange. — **36.** Cf. above, p. 130. — **37.** l. lingua Persa bracae; cf. Amplon. 378, 345, *Sarabara; braccae lingua Persarum.* — **38.** l. coniunctum; for *sarctum* see Neue Formenlehre II. 564. — **44.** l. praefecti. — **45.** l. sorices; cf. Prod. 344, f; *saures* may have been an old plural like *senes* from *senex.* — **46.** l. satellitum turma. — **50.** Cf. Isid. Or. XVI. 26, 11, *Satum . . . . unum et dimidium modium capiens.* Cuius nomen ex Hebraeo sermone tractum est. — **51.** Two glosses united, l. latronum; cf. Serv. Aen. XII. 7, *latrones*, quasi *laterones*, quod circa latera regum sunt, quos nunc *satellites* vocant; Isid. Or. X. 255, *Satelles*, quod adhaereat alteri, sive a *lateris* custodia. — **55.** Isid. Or. VIII. 4, 4, *Saducaei interpretantur iusti.* — **56.** l. virtutum; so Isid. Or. VII. 1, 7. — **57.** l. tentatio vel saturitas; cf. Isid. Or. VII. 9, 7, *Saulus* Hebraeo sermone *tentatio* dicitur eo quod prius in tentatione ecclesiae sit conversus. Persecutor enim erat, et ideo nomen habebat istud quando persequebatur Christianos. Lagarde Onom. Sacra. 71, Saulus tentatio respicientis vel saturitas. — **58.** l. Samaritae; cf. Isid. Or. VIII. 4, 9. — **59.** ? aperit, perhaps for arrepit, or is there some confusion with a gloss *scindit: aperit?* — **60.** l. scatit; so Lucr. VI. 891, or scatet. — **64.** l. SCAPUM; so Mai. VI. 544, *Scapus: summitas aut cacumen.* — **67.** l. cisternae; cf. Mai. VII. 578, *scatae: bullitiones.* Serv. Georg. I. 110, has *Scatebris; ebullitionibus*, etc. — **68.** l. Iscariotes . . . . nomine appellatus est a Iuda vico; cf. Largarde Onom. Sacra p. 62, *Iscarioth memoriale domini.* — **69.** Cf. Prod. 389. Bod. *Scaurus cui cales retrorsum habundantius eminent pede introrsus incurvum.* — **71.** l. si quominus. — **73.** l. scapha. — **74.** Cf. STATER. — **75.** l. moles id est congeries. — **77.** l. suffocat. — **79.** Cf. STRAGULO (De Vit), and Isid. Or. XIX. 26, 1, *Stragulum* est vestis *discolor*, quod manu artificis diversa *varietate* distinguitur. *Stragula vestis*, Hor. Sat. II. 3, 118, was probably glossed as *varia vestis;* but Mai. VI. 546, and VII. 581, has *strangulat: variat.* — **88.** Cf. Paul. 292, 5, *Socordiam* quidam pro ignavia posuerunt; Cato pro *stultitia* posuit. Compositum autem videtur ex *se* quod est *sine* et corde. See Loewe G. N. 169. — **91.** l. frequens assiduus. — **93.** Originally two separate glosses, secus: aliter, and secus: prope, i. e. in its use as prep. — **97.** Cf. Isid. Or. XVI. 25, 18, *Sicel*, qui Latino sermone *siclus* corrupte appellatur, Hebraeum nomen est habens apud eos *unciae pondus*, etc. — **99.** l. seditio. — **100.** l. serrae cadunt or cadant (often after *quod* in such definitions the subj. is found). **103.** l. secernit. — **105.** l. semiviro. — **106.** Cf. Verg. Aen. VI. 462. — **107.** ? Cf. De Vit and Hild. S 137, *Sentens: sentia firma vel indubitata responsio;* with note. Isidorus has the same gloss, adding ἐπιφώνημα perhaps for Ἀποφώνημα, as Julius Rufinianus § 19, Ἀποφώνημα, *sententia responsiva*, — so that the whole gloss may have been taken from some rhetorical treatise. — **108.** l. saepsit. — **109.** l. serae. — **111.** Cf. SEMESTRIA. — **112.** l. adinventor. — **113.** l. poenam. — **114.** l. scaevus: sinister; cf. **116.** — **115.** l. schema. — **118.** l. scirpus; cf. CALAMAUCUS. — **121.** l. scammata . . . athletae. — **122.** l. SCENOPEGIA . . . . figuntur . . Septembri; cf. Amplon. 379, 24, *scenopegia: tabernaculorum fictio vel casa;* Isid. Or. XVIII. 43, *Scena* . . unde et apud Hebraeos *tabernaculorum dedicatio* a similitudine domiciliorum σκηνοπηγία appellabatur. — **127.** l. tarde. — **130.** Notice the use of medius for half; cf. **149** and **160.** — **132.** l. iudicum. — **133.** l. districtus. — **134.** l. Selenites, emend from Mai. VII. 579, *Sevenites lapis persicus cuius candor cum luna crescere atque deficere monstratur;* so here, l. crescere atque minuere; Isid. Or. XVI. 10, 7, has . . . *minui atque augeri. Nascitur in Persida.* — **135.** Septimontium is explained by Festus 340 and 348, to which our gloss, however, bears little resemblance; the latter part of the gloss must be kept distinct, quia (quae) super septem montes sedet. Perhaps *festus* should be read for *certus*, with Paulus. — **136.** Probably a corruption of *semispathium* (but perhaps of *semisicium* from *sica*); cf. Isid. Or. XVIII. 6, 5, *Semispatium gladius est a media spathae longitudine appellatum, non ut imprudens vulgus dicit sine spacio, dum sagitta velocior sit. Semigladium* seems not to occur elsewhere. — **145.** l. susceptor; cf. Hild. S 145. — **148.** Cf. SERTOR and Festus 340, 22 ff. — **150.** Cf. Verg. Aen. II. 269. — **152.** l. saevit: furit. — **155.** For *districtio* in the sense of *severitas*, see Kukula de tribus Pseudo-Acronianorum Scholiorum Recensionibus, p. 11; first so used by Cassianus (Coen. Inst. V. 38), who wrote between 425 and 450. — **157.** l. seminecem; cf. Verg. Aen. V. 275. — **158.** Cf. SESCUPLUS. — **160.** Cf. Verg. Aen. III. 578. — **165.** Cf. SPHAERA. — **166.** Cf. Reichenauer Glossen p. 12, 474, *Veru: spidus*

ferreus and Gloss. Arab. Lat. *Verutus: qui habet spiltum;* but possibly *speltum* is a corruption of *spielum;* see, however, Du Cange under *spedum.* — **170.** l. Sperchius. — **173.** l. STELLIONATUS . . venditur. — **175.** l. stemmata . . . . nobilitas. — **176** and **177.** Cf. Isid. Or. VII. 11, 4, *Stephanus,* qui sermone Hebraeo interpretatur *norma* quod prior fuerat in ministerio ad imitationem fidelium. . . . Idem autem ex Graeco sermone in Latinum vertitur *coronatus.* Lagarde Onom. Sacra p. 71, *Stephanum normam nostram vel* σκοπὸν *nostrum,* quo veru et iacula diriguntur. — **178.** l. symbola : collectio nummorum. — **179.** De Vit Lex. gives gloss. Lat. Gr. *Sicilum;* ξυρὸν σκυτέως (h. e. *novacula sutoris*), l. sutorum. — **181.** For sidus = tempestas, cf. Serv. Aen. XI. 259 and XII. 451. — **184.** l. a Sicano rege. — **185.** l. gladiator. — **187.** l. Sicanium. — **188.** l. stellae. — **189.** Cf. Verg. Aen. IV. 137. l. Tyria. — **191.** Cf. SICERA; Isid. Or. XX. 3, 16, *Sicera* est omnis potio quae extra vinum inebriare potest; Amplon. 376, 209, *Sicera qui fit dactili sucu.* The MS. reading is somewhat doubtful, with several corrections by a second hand; l. omnes conf(ectiones?) liquoris quae vinum imitantur et inebriant, sed proprie est liquor ad bibendum suavis qui ex dactylis exprimitur. — **193.** l. segnities : tarditas, pigritia : cf. **197** and **198.** — **200.** l. syllogismus. — **201.** l. folliculus leguminis. — **206.** So Mai. VI. 545; *tubus* = water-pipe, otherwise one might suppose connection with Festus 352, and Paul. 353, 7, *Tullios* alii dixerunt esse *silanos,* alii rivos, etc. — **214.** l. synodus : congregatio senum. — **215.** l. synonyma : plura nomina . . . . significant. — **217.** Mai. VI. 545, *singultus; suggultium;* but *subglutium* is supported by SUBGLUTIO and by *glutio.* Both forms may have existed in the vulgar pronunciation; cf. Mai. VI. 579, *singlutum; qui loquitur per singlutos* (= *singultus,* to which it is corrected by second hand). Loewe G. N. 169 accepts *subgluttus* as a new word, following Cas. 402 [2], *singultum: subgluttum.* — **217.** Cf. SYMBOLUM in its ecclesiastical use. — **218.** l. sinus. — **219.** l. spiritum caloris vitae; cf. Pliny XXVII. 41, *Alum* quod nos vocamus, Graeci *symphiton* petraeum . . . . utilissimum lateribus, . . . pectori, pulmonibus, sanguinem reicientibus, faucibus asperis. The meaning here given seems to be based on the Lat. *Halum* as if derived from *halo,* and differs from that of Pliny l. c. and Isid. Or. XVII. 9, 61. — **220.** l. dimitte. — **221.** l. synagoga, frequently written with an i in MSS. — **223.** l. syngraphum : cautio, suscriptio. — **225.** l. synaxin. — **228.** Cf. SIROMASTES. De Vit Lex. quotes *lanceis syromatis* as a variant in Reg. III. 18, 28. — **229.** l. aestiualis. — **233.** Cf. Isid. Or. XV. 1, 5, *Sion* quae Hebraice *speculatio* interpretatur; cf. Lagarde Onom. Sacra p. 39, *Sion specula vel speculator sive scopulus.* — **235.** Cf. Lagarde Onom. Sacra p. 66, *Simon pone moerorem vel audi tristitiam;* p. 71, *Simonis obedientis sive ponentis tristiam aut audientis moerorem.* — **236.** l. scivit < scisco, sententiam dedit. — **239.** l. schisma. — **240.** l. Scyllae. — **241.** = σκνῖπες; cf. CINIFES and Isid. Or. XII. 8, 14, *Cyniphes muscae minutissimae sunt, aculeis permolestae.* — **244.** Cf. SCENA, e. g. in *scena testimonii,* for σκήνη τοῦ μαρτυρίου, Exod. 27, 21, where the Vulgate has *tabernaculum.* — **247.** l. se ligant. — **248.** spicularius is not given by Lexx. — **250.** l. spiculum. — **252.** l. oluerunt; cf. Verg. Aen. I. 404, where Servius explains by *exhaluerunt.* — **254.** l. Stygia. — **256.** Cf. STICA (Du Cange) and SPICA, and De Vit under *stigium* and *striga.* In Gr. στιχάριον is used for a variegated tunic (Eccl.). — **157.** Perhaps the latter part of the gloss is to be taken by itself = stilus : eloquium tractatoris; for *de quo* instrumental see Rönsch 393, f. — **258.** l. stemma, stemmata. — **260.** Cf. Verg. Aen. IV. 136, and below, **274.** — **264.** *censum* is here used in sense of tribute. See De Vit Lex. IV. — **265.** l. propago. — **267.** Cf. Verg. Georg. III. 366, l. gelata; cf. **280.** — **268.** l. stibio; cf. Vulg. Reg. IV. 9, 30, *Iezabel . . depinxit oculos suos stibio.* — **269.** l. Styx. — **274.** See **260.** — **270.** l. stinc; cf. Prod. 346. — **275.** l. stipes. — **277.** l. stipulatio. — **278.** l. stiva. — **279.** See above, p. 137. — **280.** ? As it is at the top of the opposite page to **267** it may be a corrupt continuation of the gloss on *stiria;* cf. Mai. VII. 581, *Stiria, spinae nomen est cujus fructus grana habet guttis similia. Ergo stiria stillicidium congelatum; et si naribus muci congeluerunt, stiria dicitur;* Ball. *stirina aqua in gelu conversa. longe* may be corrupt for *congelata.* — **282.** l. pater. — **285.** l. sobrinus; cf. Digest. 38, 10, 3, *Patrui magnus filius* ei de cuius cognatione quaeritur, *propius sobrino* vocatur. — **291.** l. solitudo : EREMUS. — **296.** l. astutia. — **297.** l. sospes. — **302.** l. solennia, and perhaps solita, but see Isid. Or. VI. 18, 1, *Solennitas* autem a sacris dicitur, ita suscepta

ut mutari ob religionem non debeat *ab solito*, id est firmo atque *solido* nominata, etc. — **304**. l. soloecismus. — **311**. Cf. Prod. 147, and De Vit. *Sconna* seems to be formed by assimilation from *sculna;* cf. Macrob. Sat. 2, 13, *Sponsione* contendit Antonius, dignus *sculna* Munatio Planco, qui tam honesti certaminis arbiter electus est.— **319**. l. spurca.— **321**. Cf. HISTORIOGRAPHUS; so storię for historiae. — **322**. Perhaps for stolidus: osus, odiosus; cf. O **192**; for this meaning compare Aul. Gellius XVIII, 4, 10, '*stolidos*, autem vocari, non tam *stultos* et excordes, quam austeros et molestos et inlepidos, quos Graeci '*μοχθηροὺς καὶ φορτικοὺς*' dicerent.' — **323**. Cf. STROPHA, and Hild. S 309, l. fraus impostura; *praeversio* is perhaps for *perversio;* Papias cited by Hild. has *conversio*. — **325**. l. STROPHARIUS. — **328** and **331**. Tertullian uses *subnixus* in sense of *subject to;* cf. Hild. S 335, *subnixus, submissus, humilis*, where Hild. makes this note, L. *subnexus*, quod magis voc. *humilis* respondet, sed *subnixus* quoque explicari possit *submissus* ut Papias *subnixus, suppositus, suffultus;* and Mai. VI. 546, *subnixus, circumdatus vel humilis*. — **332**. *subtrectare* is not given by the Lexx., but the same gloss is found Mai. VI. 547; cf. *subrogatus*, **376**.— **341**. Cf. Verg. Aen. XI. 268, Devicta Asia *subsedit* adulter, where Servius, *quidam 'sub' pro 'post' accipiunt ut sit pro 'post possedit'* legitur et *devictam Asiam* quod si est, ita intellegamus ut '*subsedit*' sit *dolo possedit*. l. *succedendo*. — **344**. l. supparant . . . parant; cf. Du Cange under *Supparare* and *Supparatura*. — **347**. I have not found the comparative *subnixius* in use. — **351**. l. subsicivis. — **353**. So Serv. Aen. III. 483, explains *subtemine* by *trama*. — **356**. Cf. Plac. 83, 4, *Subnixus est instructus aliquo auxilio*, item *subnixus, suffultus ex omni parte*. — **358**. Probably for suffasciatus; cf. FASCIATUS, but there may be some confusion with SUFFARCINATUS. — **359**. l. subcenturiatus. — **360**. Cf. Verg. Aen. III. 582, caelum *subtexere* fumo; perhaps here glossed as if a perfect; *sublustru* is all that can be read in MS., perhaps for *sublustravere*. De Vit cites *sublustro, as*, Atto. Polypt. p. 54, *Neque sublustrat;* cf. SUBLUSTRIS. — **362**. l. libidinantes. — **363**. l. dicione. — **364**. ? l. subsicivus, but praesubdolus or persubdolus is very doubtful; perhaps the *prae* is due to some corruption of *interpres;* cf. Mai. VI. 546, *subcesiva: subsequentia, succedanea dolosa*, and Gloss Isid. *subcisivus: malus interpres*. — **365**. subrepsit = surripuit. The perfects of *surrepo* and *surripio* seem to have been confused. — **366**. l. tulit. — **370**. Cf. Amplon. 378, 283, *subequilibra: sublibrato iudicio. aequilibra* is not given by the Lexx. — **371**. Cf. Verg. Aen. II. 169. — **372**. subtrecta = subtracta is perhaps in sense of *diminuta*, and so might be glossed by *inclinata* in the sense of 'on the wane;' compare above, **332**, subtrectatur. — **573**. So Mai. VI. 546; but I do not understand humiliate; cf. Seneca Herc. Furens 392, *quin ipse torvum subrigens crista caput. subice* or *subige caput* would make better sense. — **376**. l. substitutus. — **377**. See above, p. 130, = stercus suillum. — **380**. l. suillas. — **382**. l. consuere cosire. *cosire* is the later form; cf. Loewe G. N. 108. Treating of gloss *dissire: desuere*, he says, "*Sire* ist eine vulgäre Fortbildung von *suere*, die wir noch in einem andern Compositum finden, das gleichfalls die Glossae '*abavus*' bieten. *cusire: consuere*, und *consuere: cosire*. Letzteres ist dann im Italienischen zu *cucire* geworden." — **386**. Cf. Paul. 332, 4, *Scrupi dicuntur aspera saxa*, etc. — **387**. l. scopulum. — **388**. Cf. Hild. S 89 n. and Loewe G. N. 169. No verb *Scrupulo* or noun *Scrupulator* is given in Lexx. De Vit cites, *Scripulor: sollicitor; Scripulatur: sollicitatur; scrupulator: sollicitator. Scrupulatus; curiosus et sollicitatus*, etc.; so that the word seems well attested. — **389**. Cf. Hild. S 218. l. titiones, cf. Nonius 182, 18, *Titionem fustem ardentem*, and TITIO. — **392**. l. suffuso; doubtless refers to Verg. Aen. XI. 671, where most modern editors read with Med. m. p. *suffosso;* Servius speaks of both readings. — **394**. l. suffragium. — **396**. Cf. Mai. VI. 547, *suffraginatus, praecisis cruribus;* Loewe G. N. 170; Hild. S 365, *Suffraginatus, fractis cruribus vel substitus in locum decedentis*, showing a confusion with a gloss like **397**, where for *cum* accordingly read *in locum decedentis*. — **398**. l. sufficit; cf. Verg. Aen. II. 618, with Servius' note. — **400**. l. scrutinium. — **401**. l. scurrula. — **404**. l. sugillat: suffocat; cf. Plac. 80, 22, *Sugillare* est gulam constringere, quomodo dicimus *strangulare*. — **405**. l. suggerit. — **406**. Cf. **404**. — **407**. l. sator or sertor; cf. **148**. — **408**. l. summo. — **413**. l. superbiae. — **415**. Cf. SUPERARIA, and Loewe G. N. 170. — **417**. Cf. SUMPTUARIUS. — **421**. l. superstes. — **423**. l. occultari vel extremi; cf. Plac. 82, 11, *supremi et 'summi' significat et 'ultimi,'*

supprimi autem 'occultari.' — **424.** l. supplet: suppeditat, subministrat. — **425.** Cf. Hild. E **226**, *Exclusa, experdita vel subplosa.* — **426.** l. SUPPETO. De Vit Lex. under 6, says, Pro *clam* aut *alterius nomine* petere. — **427.** l. spurius ex matre nobili et patre infimo nascitur. — **429.** l. spurcitia: immunditia. — **432.** l. suavium; cf. Servius Aen. I. 256, et sciendum *osculum* religionis esse, *savium* voluptatis, *quamvis quidam osculum filiis dari*, uxori basium, *scorto savium dicunt;* and Beck p. 41, Inter *basium* et *osculum* et *savium; basium pietatis, osculum amicitiae, savium luxuriae.* — **433.** l. tibiae. — **436.** l. sursum tollit (or tulit). — **437.** l. suspicit; cf. Verg. Aen. I. 438, fastigia suspicit urbis, where Servius explains by *miratur.* — **438.** The same gloss is given by Mai. VI. 547 and VI. 580. — **439.** For *surso, suso* preserved in Italian; see Loewe G. N. 217. — **442.** l. sospes. — **444.** Cf. SUSURRO. *bilinguis* is here used in sense of deceptive. — **448.** l. caligarius. — **449.** Cf. Serv. Verg. Aen. IV. 624. — **450.** For sarsores cf. *Excerpta e Gloss. Vet.* Vulc. p. 556, *Sarsor* ῥάπτης. — **454.** l. strues; cf. Festus 310, Paulus 311. — **455.** Cf. Festus l. c. *Struices: antiqui dicebant extructiones omnium rerum.* l. constructio, conpaginatio. — **456.** Cf. Serv. Aen. X. 678, *ubi arenosa sunt loca.* — **457.** l. Suovetaurilia . . . tribus.

T.

3. l. furunculus; cf. above, p. 130. — **5.** l. thalami, for cubiculus m. see Appel p. 85. — **6.** De Vit gives *Tarrium quod corio tegitur in sella aut curru*, doubtless for *taurium*, of which this may be the plural; cf. TAURINAE used for *caligae.* — **7.** cf. Hild. T 25 and Festus 356 b, 17. — **10.** = tanto ocius, see Terence Eun. 609; cf. Mai. VI. 547, *Tam tocius: tam citius.* — **11.** l. talentum; before XXII an L has dropped out; cf. Mai. VI., *Talentum centum pondo, modo habens pondo CXX;* Isid. Or. XVI. 25, 22, Apud Romanos enim *talentum* est LXXII librarum, sicut Plautus ostendit, qui ait *duo talenta esse CXLIV libras.* For various valuations placed on talentum see De Vit Lex. — **12.** cf. Verg. Aen. X. 846, quoted by Priscian (Keil II. p. 101), under the examples of affirmative *ne.* — **12.** cf. Verg. Aen. III. 29, where Servius explains *tabo* by *corrupto sanguine.* — **15.** l. cuneus vel chors (= cohors). — **16.** l. poenae; cf. Hild. T 12. — **17.** See above, p. 131. Servius, however, Aen. II. 140, has, quae *sterilis* autem est, *taurea* appellatur. — **18.** Cf. TALITRUM and Hild. T 11, *Talatrus, colafus in talo. Talitius, talastrum, talastrus*, and *talatrus* are also found; cf. Loewe G. N. 171. — **20.** l. Tartarum. — **22.** There appears to be some confusion with *tandem.* — **23.** Cf. Paul. 367, 2, *Trabica navis, quod sit trabibus confixa.* Pacuvius, "Labitur trabica in alveos," but what is *tuba?* Is there perhaps some confusion with a gloss *tibia* = *tuba?* cf. Isid. Or. XVIII, 4, 3, *Tubam* autem dictam quasi *tofam* id est *cavam.* Item *tubam*, quasi *tibiam.* — **24.** l. transtris; cf. Verg. Aen. V. 136; l. remiges. — **26.** l. trapetes: molae. — **27.** l. teli genus quod; cf. Paul. 367, 16, *Tragula genus teli, dicta quod scuto infixa trahatur.* — **28.** l. tran senna: tegula per quam lumen venit; cf. Mai. VI. 549, *Transennam dicit tegulas per quas lumen admittitur*, Nonius 180, 15, *Transenna, non ut quidam putant, transitus, sed est fenestra.* — **29.** l. tranquillus: placidus. — **30.** l. trabea . . . senatoria purpurea. — **31.** l. Thraces: sagittarii. — **33.** l. tragoptisana. — **35.** l. taedet: paenitet et taedium patitur. — **39.** cf. *tollerunt: genuerunt*, Gloss. Isid. p. 696, Vulc. cited by De Vit., which seems to be another instance of the perf. *tolli;* cf. D **108.** — **40.** l. coopertoria. — **41.** l. taedae. — **42.** cf. TELONEUM. The better form seems to be preserved in Mai. VI. 548, *Teloneum quasi omnium litorum fiscalis conductio.* — **44.** l. TELETA, perhaps the abl. *teletis* occurred in passage glossed, and hence *tellitus.* — **49.** cf. PRAESUMPTOR as used by Tertullian and Augustine. — **53.** l. vehiculi. — **54.** l. papiliones. — **60.** l. Terpsichore: musa quinta. — **62.** l. theosebia. — **66.** l. tereti, or perhaps teretes: trunci rotundi; cf. Servius Aen. VI. 207, *Teretes truncos; teres* est *rotundum* aliquid cum proceritate, and VIII. 633, *Tereti cervice, rotunda* cum longitudine; cf. Hild. T 56. — **69.** l. terit. — **70.** l. fugere. — **71.** l. terrigenae. — **73.** l. Terminum quem deum putaverunt. — **75.** ? cf. TERRICULA, Nonius 227, 26, Hild. T 64, and Mai. VIII. 593, *terrivola*, formidolosus tumidus, et dicitur *terrivola* quasi cum terrore *volans.* — **77.** l. tereti gemma. — **79.** l. incutit. — **81.** l. THERISTRUM: MAVORTIUM quo. — **82.** l. tripudiat. — **83.** l. tris soles; cf. Serv.

Aen. I. 745. — **85**. l. threnus: lamentatio. — **88**. cf. TESCA, TESQUA and Fest. 356, 22, Paul. 357, 4. — **89**. l. testatur. — **90**. l. tempestivum. — **92**. l. tesserarius. — **93**. l. taesus. — **96**. Cf. Serv. Aen. II. 16, nam ubi naves fiunt *textrinum* vocatur, and XI. 326, Graece ναυπήγια, Latine *textrina* dicuntur, quoting from Ennius. — **99**. On account of *rasurae* the reading of this gloss is very doubtful. It is probably the same gloss with Paul. 366, 11, *Tetini pro tenui.* — **101**. The MS. has Tyarus, not Tyrrus; read THIASUS . . . Liberi. — **102**. l. thiasum; cf. Mai. VII. 583, *Thyasus chorus sacra dicentium Liberi atris* (sic) *et gestamen sacrorum erat, ut vitibus uvae*, and *Thyasis: sacris*, Hild. T 74, cites Papias, *tyasi ·ι· chori, sacrae laudes virginum;* cf. **105**. — **103**. l. tiara: . . . pileum Phrygiorum. — **104**. l. Thetis. — **105**. Cf. note on **103**. — **106**. l. tibia; for symphonia in this sense see De Vit Lex. under § 3. — **109**. l. tiro. — **110**. l. Tybris: Tiberis a Tiberino rege; probably a corruption of Paul. 366, 2, *Tiberis fluvius dictus a Tiberino rege Albanorum . . . Tibris a Tibri rege Tuscorum;* cf. Varro, L. L. V. 29, 30, Servius Aen. III. 500, Isid. Or. XIII. 21, 27. — **111**. l. Tylos . . . arborum . numquam; cf. Pliny XII. 40, *Nulli arborum folia ibi decidunt*, etc. — **112**. l. tibicines; cf. Paul. 366, 3, *Tibicines in aedificiis dici existimantur a similitudine tibiis canentium, qui ut cantantes sustineant ita illi aedificiorum tecta; continens* is perhaps here used somewhat in sense of *sustinens.* — **113**. l. tirocinia. — **114**. Cf. TYPHE and TYPHUS, and Isid. XVII. 9, 101, *Typhus vero quae se ab aqua inflat. Unde etiam ambitiosorum et sibi placentium hominum tumor typhus dicitur.* — **117**. l. Titania = Diana, so Serv. Aen. X. 216, *Phoebe, Luna* sicunt *sol Phoebus.* Item *Titan sol* et *Titanis Luna.* — **118**. l. Titanes: principes. — **120**. l. Tisiphone. — **124**. l. trierarchus. — **125**. So Serv. Georg. I. 153, says *tribuli, genus spinae.* — **127**. Abbreviated from a gloss like Hild. T 123, *Trinepus, pronepus pronepotis, id est sexta generatione superioris gradus.* — **128**. l. devictum. — **129**. l. tripodes. — **130**. l. ἄκρα habeat id est promunturia Pachynum, Pelorum Lilybaeum; cf. Isid. Or. XIV. 6, 32; Serv. Aen. I. 196. — **131** and **132**. Cf. Isid. Or. XIX. 1, 10, *Trieris navis magna, quam Graeci dulconem* (durconem Lindemann, durionem Cod. Zittaviensis) *vocant de qua in Esaia dicitur, Non transibit per eam trieris magna.* The passage referred to is Isaiah 33, 21, where the Vulgate reads: Non *transibit per eum* navis remigum, neque *trieris magna* transgredietur eum; and the Septuagint, ποταμοὶ καὶ διώρυχες πλατεῖς καὶ εὐρύχωροι· οὐ πορεύσῃ ταύτην τὴν ὁδόν οὐδὲ πορεύσεται πλοῖον ἐλαῦνον. The reading *durconem* might have some connection with διώρυχες. Prof. Gildersleeve suggests that *dulcones* may stand for δίολκοι νῆες. I had thought of a possible connection with δόλιχος = kidney-bean, used like the Latin *phaseolus.* — **135**. l. Trinacrii. — **136**. l. piscis; cf. Pliny N. H. 32, 144, *Tritones, Nereides, homines qui marini vocantur.* — **139**. l. Trionum: portitores signorum. So Bootes, Stat. Theb. I. 662, is called *portitor Ursae;* cf. Gloss. Isid. Tiaries; portitores signorum; Vulcan. emends Triarii, but I think it should read *Triones.* — **140**. l. erogati, or tripertit: erogat. — **141**. Cf. Verg. Aen. VI. 417. — **142**. l. tribules. — **143**. l. triarii: tertio abbreviated from some fuller gloss like *qui in tertio loco in exercitu deponebantur;* cf. Varro L. L. V. 89, *Pilani triarii* quoque dicti *quod in acie tertio ordine* extremis subsidio deponebantur. — **146**. l. tomen. — **147** and **149**. Cf. THOLUS; l. rotundum quod and fastigium. — **150**. l. torvus. — **151**. Hild. T 71, proposed to change to *choragium: ornatus mimicus = scenicus;* as Festus 52, 10, *choragium instrumentum scenarum; thoracium* of itself is of course a perfectly good word, and occurs Ampel 8; for other glosses see De Vit under *Toragium.* — **152**, l. tomus. — **153**. Amplon. 383, 187, has *Toles membra sunt circa cavam;* cf. Festus, 356, b. 14, *Toles, tumor in faucibus quae per diminutionem tonsillae dicuntur;* l. toles: membra sunt circa uvam. — **154**. Cf. Paul. 357, 1 (Festus 356, 3), *Thomices*, Graeco nomine appellantur et cannabi impolito et sparto leviter tortae restes ex quibus funes fiunt, etc.; l. restis; cf. Hild. T 97, *Torrens, fluvius ex pluvia collectus vel aqua cum impetu decurrens.* — **155**. l. fustis. — **156**. l. fluvius, ex pluvia. — **160**. l. stupet, languet. — **163**. l. TORREMATA. — **164**. l. totidem. — **167** and **169**. l. torum . . . coadunatio, see Verg. Aen. VI. [illegible]; cf. Isid. Or. XI. 1, 63. In brachiis enim *tori* lacertorum sunt, et insigne musculorum robur existit. *Hi sunt tori, id est musculi: et dicti tori*, quod *illic viscera torta* [illegible]; tostum is perhaps for *torum*, and this may have come from some such explanation of *torum id est tortum.* — **168**. l. thorax; lorica. — **169**. l. lacerti bracchiorum. —

170. Cf. TORNATURA. — **171.** l. torrida. — **172.** l. thorace. — **173.** l. torpidus: stupidus. — **176.** Cf. TROPOLOGIA. — **178.** l. trossuli: equites; cf. Paul. 367, 20. — **179.** l. trochus. — **182.** l. bucina. — **183.** ? De Vit cites tupha: tiara regia. Here I think we should read tupha = tufa: mitra regia; cf. Du Cange, TUFA, and τοῦφα in Byzantine Greek. — **187.** l. vel postea with Hild. T 148. — **188.** l. turabulum: thymiamaterium. — **190.** l. turbida. — **192.** l. tempestas, or tempestate; cf. Verg. Aen. I. 45, *Turbine corripuit*, where Servius explains *volubilitate ventorum*. — **193.** Cf. TURIFICATUS. — **194.** Cf. Prod. 378, and TEGELLARIUS, see Du Cange under *Tectum*. — **195.** l. verberatur. — **196.** l. propter terrae congeriem; cf. Serv. Verg. Aen. III. 22. — **201.** l. hospitium modicum; Festus 355, 5, *Tuguria a tecto* appellantur *domicilia rusticorum* sordida, Serv. Verg. Ecl. I. 69, *Tuguri a tegendo* dictum; *teia* may be a corruption of *tecta*, or of *a tego* (cf. Sp. *teja*, It. *tegula*, Fr. *tuile*). — **204.** l. turget: tumet. — **205.** l. statera. — **208.** l. truces. — **213.** l. custodiam.

U, V.

1. l. incedit; cf. Hild. U 12 n. — **2.** l. movet. — **3.** l. valvulum: fabae corium; cf. Festus, 375 a, 10, *Valvoli fabae folliculi appellati sunt quasi vallivoli, quia vallo facti † excutiantur*. Cato R. R. LXII. 1, speaking of Bubus medicamentum, has *vitis albae caules* III. *fabulos albos* III. Columella, VI. 4, 3, has *multi caulibus vitis albae et valvulis ervi bubus medentur;* so that possibly *vabulum* is a corruption of *fabulum*. I at first thought there might be some connection with Plac. 43, 4, *Fabricora* (Papias, *Fabicora* H *va.*, *Favicora* C R) *proverbium in eos qui domesticis alimentis usi aliis laborarent, dictum ab eo quod Capitolium aedificanti Tarquinio fabros ac structores corvi cum suo victu miserunt*. — **5.** l. et fideiussiones vel sponsiones. — **6.** Cf. Hild. V 6. — **8.** l. mare. — **9.** l. fideiussores. — **11.** l. vafrum; cf. Hild. V 14, *Vafre: inaequaliter, varium* seems to be used in the sense of *fickle, inconstant*, and is a sort of etymological explanation, not worse than the one given by Nonius 19, 30, *valde Afrum*. — **13.** l. vagitatur (cf. VAGITO): violenter. — **14.** l. Varus; cf. Prod. 388. — **16.** l. valetudinarius . . . aegrotat. — **18.** l. vallus. — **21.** = validus. — **22.** l. valitant; cf. Hild. V. 26; the word seems only to occur in glossaries. See Loewe G. N. 170. — **23.** l. vagurrit: per otium vagatur; cf. Hild. V 17. — **24.** l. varices: vitia quaedam pedum; cf. Nonius 25, 10, *Vatrax et Varicosus: pedibus vitiosis*. — **28.** Nonius 19, 30, *Vafrum est callidum et quasi valde Afrum et urbanum. asper* is probably a corruption of *afer* (cf. corruption in Mai. VI. 550, *babis: valde, afrum est*). — **29.** The explanation *inaequaliter* is probably due to *varium;* cf. **11.** — **30.** l. Varus as in **14.** — **31.** l. vasta. — **32.** l. bascaudas: conchas aereas. — **34.** l. vesanus. — **40.** l. lanosae. — **41.** l. vehiculum: . . . omne quod ad portandum utile est. — **49.** Perhaps for volgum, but possibly from a gloss like *villum: pilum*, or *villum pro pilum dicitur* (cf. Pr. *vell*, It. *vello*, Sp. *vello*). — **55.** ? Perhaps for venustari: componi = comi; cf. Mai. VIII. 623, *Venustare: ornare*. — **57.** l. veniit: vendidit. — **58.** l. venenarius: herbarius; cf. De Vit under herbarius. — **59** l. venditantibus. — **65.** l. volubile. — **67.** l. auferunt; cf. Amplon. 385, 118, verrunt: subtrahunt, followed by veluti: scopant, and Hild. V 101. — **69.** l. caedit. — **71.** verro in sense of to hide, cover (see Lexx.), may have been glossed by *vestiunt*. — **74.** Cf. Prod. 411, and PERTUSORIUS, PERTUNDA. — **78.** l. not *versabilis*, but versipellis. — **82.** compare Italian *primavera*. — **83.** l. verbo tenus: sicut dictum or dicunt; cf. Hild. V 94 n. — **86.** l. vesperugo: stella: cf. Paul. 368, 16. — **91.** Kaegi thinks that *viaca*, not *viaca*, may be the reading of the MS., although the doubtful letter looks more like *c;* l. βίαια: vehementia. — **92.** l. hastam torquere. — **93.** l. fulget . . . dirigit. — **95.** l. hostia. — **97.** Du Cange gives a verb *vicissere = per vices agere*. — **103.** l. vigilans. — **104.** l. custos. — **105.** l. viburna; cf. Verg. Ecl. I. 25. — **106.** l. ligavit. — **107.** De Vit cites Vinnolatus: lepidus, blandus, mollis; cf. Isid. Or. III. 19, 13, *Vinnolata* vox est vox levis et *mollis* atque flexibilis. Et vinolata dicta a vinno, hoc est concinno *molliter flexo*. But *vinnubis* is rather a corruption of *vinnulus;* cf. Paul. 377, 8, Nonius 186, 10. — **109.** l. vineas: machinamentorum . . . . . turrium. — **112** l. singillatim . . . * semigradatim. — **113.** l. dicitur; cf. Isid. Or. XI. 1, 21, *Virgo a viridiori aetate dicta est.*

— 116. Perhaps for vis: virtus; but compare De Vit, *Vors, tis,* Virgil Gramm. p. 77. Mai. *Versus* autem a quibusdam in nomine non recipitur principali sed in participio: ibi autem *vorsum* scribunt, quia *vors* ipsa pagina dicitur, Lucano dicente, *vortibus* egebant multi. — 117. l. animi. — 119. l. visere. — 122. l. laetans. — 125. l. vindex. — 127. Cf. De Vit and VIRIOSUS. — 128. l. virago: fortis; so Isid. Or. XI. 2, 22, *Antiqui enim fortes feminas ita vocabant.* — 133. l. visibus: obtutibus. — 137. l. vitilitigat; cf. Loewe G. N. 137. — 142. l. volubilitas: mentis varietas. — 144. Cf. Serv. Georg. III. 411. — 146. Cf. Hild. U 218, Serv. Aen. III. 233, Isid. Or. XVII. 7, 67. — 147. l. obsorptio et fossa et terrae hiatus. — 148. l. vosmet. — 150. l. vovet. — 151. vuetema = voetema = boetema = βοήθημα (suggested by Professor Gildersleeve). — 152. l. explendi voti. — 154. l. ubertas. — 155. l. ubertim. — 158. l. abstractum. — 159. l. palam. — 160. l. vultum; comp. It. *volto.* — 169. For vulnus = ulcus, see Rönsch die lexicalischen Eigenthümlichkeiten der Latinität des sogen. Hegesippus, p. 275. — 171. l. ulterior. — 173. De Vit cites Gloss. MS. *ultatus: dampnatus,* and Amplon. 386, 43, *Vultatus: damnatus;* perhaps corrupt for multatus. — 175. l. vindicamus. — 177. l. ultro citroque. — 181. l. gremium. — 183. Cf. Hild. V 261, Vultuosus: tristis. — 184. l. herbae. — 188. l. umquam. — 189. Cf. Verg. Aen. VI. 218; l. ebullientia. — 191. Cf. UNUS, § 2. — 192. l. uncus. — 193. l. unigenae. — 194. l. vincire. — 196. l. adipe. — 197. l. nubit? cf. UNICUBA. — 199. l. diminutio est. — 201. l. urus. — 202. Cf. URVUM, Varro L. L. V. 127 and 135. — 203. Cf. UR, Hebrew. Isid. X. 130, "*ur enim flamma dicitur.*" — 204. For *quarta* cf. Papias, *Quartarium: genus mensurae id est urna;* Joh. de Janua. *Quartarium, mensura· quae quartam partem sextarii capit.* — 207. l. ustulato. — 210. l. ustrina. — 211. l. consuetudine. — 213. l. praesumit. — 220. Cf. *Ut pute: nam sicut,* Prod. 175. *pute* is glossed here as if it were *putet.* — 223. l. potius. — 225.? = utere: fruere. Perhaps *utere* is act. inf.; cf. UTO.

X.

1. l. XENODOCHIUM venerabilem . . . suscipiuntur.

Y.

1. l. hyperbolice. — 2. l. hymnum. — 3. l. hydria. — 4. l. hydrus. — 5. l. hyades: stellae. — 6. l. hypotheca. — 7 belongs with 5, Pliades. — 8. ? *ypinx* not in Lexx.; for lamminas cf. L 30, *lamnas: animal similis pardo.*

Z.

1. Cf. Du Cange, ZERNA, and Isid. Or. IV. 8, 6, *Impetigo* . . . vulgus *sarnam appellant.* — 2. l. aemulatio. — 4.? May have something to do with *seriatim.* — 5. Cf. Prod. 154, and ZEMA = Gr. ζέμα. — 6. l. Zephyrus.

APPENDIX.

I. Proceedings of the Sixteenth Annual Session, Hanover, 1884.

II. Treasurer's Report (p. iii).

III. List of Officers and Members (p. xlv).

IV. Constitution of the Association (p. lvi).

V. Publications of the Association (p. lviii).

MEMBERS IN ATTENDANCE AT THE SIXTEENTH ANNUAL SESSION.

Cyrus Adler, Philadelphia, Pa.
E. H. Barlow, Tilden Seminary, West Lebanon, N. H.
S. C. Bartlett, Dartmouth College, Hanover, N. H.
I. P. Bridgman, Cleveland, Ohio.
M. L. D'Ooge, University of Michigan, Ann Arbor, Mich.
Herbert M. Clarke, Syracuse, N. Y.
Albert S. Cook, University of California, Berkeley, Cal.
W. W. Eaton, Middlebury College, Middlebury, Vt.
F. B. Goddard, Malden, Mass.
F. B. Gummere, Swain Free School, New Bedford, Mass.
H. C. G. von Jagemann, Earlham College, Richmond, Ind.
C. R. Lanman, Harvard College, Cambridge, Mass.
James C. Mackenzie, Lawrenceville, N. J.
F. A. March, Lafayette College, Easton, Pa.
C. K. Nelson, Brookeville Academy, Brookeville, Md.
W. B. Owen, Lafayette College, Easton, Pa.
Henry E. Parker, Dartmouth College, Hanover, N. H.
T. C. Pease, West Lebanon, N. H.
Tracy Peck, Yale College, New Haven, Conn.
B. Perrin, Adelbert College, Cleveland, Ohio.
E. D. Perry, Columbia College, N. Y.
Louis Pollens, Dartmouth College, Hanover, N. H.
Rufus B. Richardson, Dartmouth College, Hanover, N. H.
W. S. Scarborough, Wilberforce University, Wilberforce, Ohio.
C. P. G. Scott, Columbia College, New York.
T. D. Seymour, Yale College, New Haven, Conn.
J. A. Shaw, Trinity School, Tivoli-on-Hudson, N. Y.
F. B. Tarbell, Yale College, New Haven, Conn.
W. H. Treadwell, Yale College, New Haven, Conn.
Minton Warren, Johns Hopkins University, Baltimore, Md.
B. W. Wells, Friends' School, Providence, R. I.
J. W. White, Harvard College, Cambridge, Mass.
W. D. Whitney, Yale College, New Haven, Conn.
J. H. Wright, Dartmouth College, Hanover, N. H.

[Total, 34.]

AMERICAN PHILOLOGICAL ASSOCIATION.

HANOVER, N. H., Tuesday, July 8, 1884.

THE Sixteenth Annual Session was called to order at 4 P. M., in Dartmouth Hall, by the President of the Association, Professor M. L. D'Ooge, of the University of Michigan.

The Treasurer, Professor Edward S. Sheldon, of Harvard College, submitted his report for the year 1883–84, and it was read by the Secretary, Professor C. R. Lanman, of Harvard College. The summary of accounts for 1883–84 is as follows: —

RECEIPTS.

Balance on hand, July 9, 1883		$365.88
Fees, assessments, and arrears paid in	$233.00	
Sales of Transactions	66.50	
Interest on deposits	7.31	
Total receipts for the year		306.81
		$672.69

EXPENDITURES.

Postages	$26.00	
Expressages	.85	
Job printing and stationery	10.55	
Total expenditures for the year		$37.40
Balance on hand, July 3, 1884		635.29
		$672.69

On motion, the Chair appointed Dr. Edward D. Perry and Dr. Charles P. G. Scott, both of Columbia College, New York, a committee to audit the Treasurer's report.

The Secretary announced that he hoped to have the annual volume of Transactions for 1883 ready for publication in a few days.

The Secretary announced the election of a number of new members. Their names are given here, and, for convenience, those also of others elected and announced at subsequent sessions. The number of accessions is fifty-seven.

Rev. Robert Anderson, Teacher of English, Episcopal Academy, Philadelphia, Pa. (1314 Locust St.).

Robert Arrowsmith, Ph. D., 236 Degraw St., Brooklyn, N. Y.

Grove E. Barber, Professor of Latin, State University, Lincoln, Nebraska.

E. H. Barlow, Principal of Tilden Seminary, West Lebanon, N. H.

George A. Bartlett, Professor of German, Harvard University, Cambridge, Mass.

Rev. Samuel C. Bartlett, D. D., LL. D., President of Dartmouth College, Hanover, N. H.

I. T. Beckwith, Ph. D., Professor of Greek, Trinity College, Hartford, Conn.

T. S. Bettens, A. M., "The Kensington," cor. Fifty-seventh St. and Fourth Ave., New York.

Louis Bevier, Ph. D., Rutgers College, New Brunswick, N. J.

Hjalmar H. Boyesen, Ph. D., Professor of German, Columbia College, New York ("The Hetherington," cor. Park Ave. and Sixty-third St.).

Bradbury H. Cilley, Phillips Academy, Exeter, N. H.

I. P. Bridgman, Principal of the Cleveland Academy, Cleveland, Ohio.

Walter Ray Bridgman, Yale College, New Haven, Conn.

LeBaron R. Briggs, Instructor in English, Harvard University, Cambridge, Mass.

William Hand Browne, Librarian of the Johns Hopkins University, Baltimore, Md.

William H. Carpenter, Ph. D., Instructor in Icelandic, Columbia College, New York (7 East Thirty-first St.).

Herbert M. Clarke, Ph. D., 86 James St., Syracuse, N. Y.

William T. Colville, Professor of Modern Languages, Kenyon College, Gambier, Ohio.

Joseph Randolph Coolidge, Instructor in Spanish, Harvard University, Cambridge, Mass.

James G. Croswell, Professor of Greek and Latin, Harvard University, Cambridge, Mass.

Louis Dyer, Professor of Greek and Latin, Harvard University, Cambridge, Mass.

Arthur M. Elliott, Professor of the Romance Languages, Johns Hopkins University, Baltimore, Md.

Alfred Emerson, Ph. D., Instructor in Classical Archaeology, Johns Hopkins University, Baltimore, Md.

Mrs. G. W. Field, 204 Columbia Heights, Brooklyn, N. Y.

Isaac Flagg, Professor of Greek, Cornell University, Ithaca, N. Y.

W. G. Frost, Professor of Greek, Oberlin College, Oberlin, Ohio.

Albert S. Gatschet, United States Bureau of Ethnology, Smithsonian Institution, Washington, D. C.

Charles T. Gayley, Professor of Latin, University of Michigan, Ann Arbor, Mich.

Farley B. Goddard, Ph. D., Malden, Mass.

G. Stanley Hall, Professor of Psychology and Pedagogics, Johns Hopkins University, Baltimore, Md.

J. Rendell Harris, Professor of New Testament Greek, Johns Hopkins University, Baltimore, Md.

Paul Haupt, Professor of the Semitic Languages, Johns Hopkins University, Baltimore, Md.

Lucius Heritage, Instructor in Latin, University of Wisconsin, Madison, Wis.

A. V. W. Jackson, Fellow of Columbia College, Highland Ave., Yonkers, N. Y.

Frank E. Jennison, Instructor in Latin and English, Phillips Academy, Exeter, N. H.

Martin Kellogg, Professor of Latin, University of California, Berkeley, California.

George Lyman Kittredge, Instructor in Latin, Phillips Academy, Exeter, N. H.

William I. Knapp, Professor of Modern Languages, Yale College, New Haven, Conn. (75 Whitney Ave.).

Francis A. March, Jr., Lafayette College, Easton, Pa.

H. Z. McLain, Professor of Greek, Wabash College, Crawfordsville, Ind.

George McMillan, Professor of Greek, State University, Lincoln, Nebraska.

Rev. Henry A. Metcalf, Auburndale, Mass.

Rev. Hinckley G. Mitchell, Ph. D., Tutor in Latin and Hebrew, Wesleyan University, Middletown, Conn.

Charles P. Parker, Tutor in Greek and Latin, Harvard University, Cambridge, Mass.

Rev. Henry E. Parker, D. D., Daniel Webster Professor of Latin, Dartmouth College, Hanover, N. H.

Rev. Theodore C. Pease, West Lebanon, N. H.

Ezra J. Peck, Graduate Student of Philology, Cornell University, Ithaca, N. Y.

Louis Pollens, Professor of French, and Librarian, Dartmouth College, Hanover, N. H.

Horatio M. Reynolds, Tutor in Greek, Yale College, New Haven, Conn.

Alfred L. Ripley, Professor of German, Yale College, New Haven, Conn.

Arthur W. Roberts, Hughes High School, Mt. Auburn, Cincinnati, Ohio.

Edward H. Spieker, Ph. D., Instructor in Classics, Johns Hopkins University, Baltimore, Md.

Ambrose Tighe, Tutor in Latin, Yale College, New Haven, Conn.

James A. Towle, Professor of Greek, Ripon College, Ripon, Wisconsin.

Horatio Stevens White, Professor of German, Cornell University, Ithaca, N. Y.

Alexander M. Wilcox, Ph. D., Tutor in Greek, Wesleyan University, Middletown, Conn.

Henry Wood, Professor of German, Johns Hopkins University, Baltimore, Md.

[Total 57.]

At 4.20 P. M. the reading of communications was begun.

1. The Theory and Function of the Thematic Vowel in the Greek Verb, by Professor W. S. Scarborough, of Wilberforce University, Wilberforce, Ohio.

After remarking upon the agglutinative character and complexity in structure of the Greek verb, the writer defined "thematic vowel," and gave illustrations from the Greek, Latin, and Sanskrit. Explanations of the phonetic changes of the vowel, peculiar to each of these languages, were offered. The theories of Bopp, Pott, and Curtius as to the nature and origin of this vowel were passed in review and briefly discussed. Cases of apparent omission in several Greek verbs were presented, and the explanation of omission by syncopation was condemned. The conclusion was drawn that the vowel is an important element in the make-up of the verb for euphonic purposes; that its especial function is to facilitate pronunciation, and that in force it is conjunctive, serving to unite or connect the termination with the verbal base.

2. The Crastinus Episode at Palaepharsalus, by Professor B. Perrin, of Adelbert College, Cleveland, Ohio.

Caesar's account of the episode (B. C. iii. 91), and his praise of the exploit of Crastinus (iii. 99, 2–3), leave us in doubt about its precise nature from a military point of view. Subsequent writers who mention or describe the episode shed no light upon it. Cf. Lucan, Phars. vii. 470–473; Florus, ii. 13 [= iv. 2], 46; Plutarch, Caes. 44, Pomp. 71; Appian, Bell. Civ. ii. 82. The two versions of Plutarch are essentially identical, and do not vary materially from that of Caesar. Certain additions may be traced to Asinius Pollio, who was probably the principal source for Appian also.

From a comparison of all these passages the following general outline-sketch of the episode may be made. On leaving the camp Caesar hailed a centurion named Crastinus, and asked him what he thought of the prospects. Crastinus replied, "We shall conquer gloriously, Caesar, and to-day, alive or dead, I shall win your praise." Just as Caesar gave the battle signal, therefore, Crastinus made a stirring appeal to his fellow soldiers, charged foremost upon the enemy, followed by a large company, and died in the thick of the fight with a sword run through his mouth and neck.

To this general outline-sketch several specific features may be added, deduced from Caesar's words. It can be shown (1.) just what kind of a soldier Crastinus was, (2.) what special commission he had received, and (3.) what his exploit actually was.

1. Of the veteran soldiers whose terms had expired, those who had accepted

lands as a special reward for service could be called out (*evocare*) for new campaigns, and were under obligations to answer the call; those who did not receive such lands, when called anew into service, could respond to the call or not, and if they did were *voluntarii*. The *voluntarii*, then, were a special class of *evocati*. A *voluntarius* was an *evocatus*, but not every *evocatus* was a *voluntarius*. Pompey's long career as general had made it possible for him to raise a large body of *evocati*, but Caesar had only *voluntarii*. The troop which followed Crastinus were *voluntarii*. Crastinus himself was, strictly speaking, a *voluntarius*. Caesar calls him freely an *evocatus*, either because he felt no need of making the distinction, or because *evocatus* was more often used in the singular than *voluntarius*.

2. Crastinus had been *primipilus* of the tenth legion in the preceding year, and so had directly commanded the maniple of *pilani*, the front and right of the first cohort in the front line of battle. His hortatory speech, beginning, "Sequimini me manipulares mei qui fuistis," was addressed to this body of soldiers, who stood nearest him, but no longer directly under his command. He himself commanded a special corps of one hundred and twenty *voluntarii*, stationed on the right of the front right cohort of the tenth legion, and had been commissioned to make a special charge with his troop before the regular line of battle, in order to inspire this to a bolder attack, and especially to throw the enemy's extreme left into some confusion before the tenth legion should reach and rout it.

3. The actual exploit of Crastinus was to set an inspiring example to Caesar's whole line of battle, and especially to the tenth legion, on whose success the fate of the day had been made to depend, by leading a body of re-enlisted veterans in such a fierce charge upon the enemy's extreme left, that it was thrown into some confusion, and would have been easily driven back when the shock of the onset of the regular line came, had not Crastinus fallen. But his death, and the failure of his exploit to accomplish all that had been intended, were more than made good by the exploits of the famous *quarta acies*, which not only routed Pompey's cavalry, but attacked in the rear the infantry left of Pompey, which was holding out well against the flower of Caesar's army, the pet tenth legion. To the *quarta acies*, therefore, Caesar discriminatingly gives praise for the victory; to Crastinus, for valor.

3. On a group of Sanskrit Derivatives (çaraṇá, çárman, çárīra, etc.), by Professor C. R. Lanman, of Harvard College, Cambridge, Mass.

There are given by Boehtlingk and Roth, in the St. Petersburg Sanskrit Lexicon, three roots of the form çar or çṛ. The first means 'tear,' and its present is çṛ-ṇā́-ti (formed like δάμ-νη-μι, 'tame'); the second means 'boil,' and is used chiefly in the participial forms çṛ-tá and çrā-tá, and in the causative. The third, say Boehtlingk and Roth, is equivalent to the root çri, 'lean upon'; it appears in no verbal forms, but is assumed on account of the derivatives çaraṇá, çárman, āçāra, çā́lā, and çárīra.

The aim of the paper was to show that the derivatives in question are not connected with the root çri, but are rather to be referred to a root çṛ with the meaning 'cover.'

çaraṇá means, 1. 'protecting, affording shelter'; 2. as a neuter substantive, 'that which affords shelter, a shed *or* hut'; and 3. in a more general and abstract sense, 'refuge, protection.'

çárman has for its principal and older meanings, 'cover, shelter, protection.'

ā-çāra is a ἅπαξ λεγόμενον of the Atharva-veda, and means, as the context plainly shows, 'a cover from the rain.'

çā'lā means 'hut, house, room, stable.'

Leaving out of the question, for the present, the difficult word çárīra, let us consider the relation of the four words just defined to the root çri, 'lean upon.' To this root, as I said, they are referred by the great Sanskrit Lexicon. Grassmann, also, in his Dictionary of the Rig-veda, follows the Lexicon in regard to the first two; the other two do not happen to occur in the Rik. Against the derivation of the words from çri there are objections which concern both the form and also the meaning.

I. First, the form. All the five derivatives point of course to a radical syllable with ar or ṛ, not to one with ri. Aside then from these derivatives, what evidence is there for a root çṛ as collateral form of çri? I find none, either direct or analogical.

1. Verbal forms and derivatives from çri are exceedingly common (çráyate, çiçrā'ya, áçret, çritá, -çrít, etc.; çrayaṇa, āçraya, etc.); but there is not a single one that can be referred to a root of the form çṛ with the sense of çri.

2 *a*. As for analogies — it is indeed true that ṛ sometimes comes from the contraction or samprasāraṇa of other syllables than ar or ra;[1] so from ri in tṛtī'ya, 'third,' from tritá (τρίτο-ς), which in turn comes from trí, 'three.' Similarly, the root çru, 'hear,' forms the present çṛṇumás, with contraction of ru to ṛ. But these are manifestly secondary weakenings. Of such a secondarily weakened ṛ we should have to find examples of a subsequent strengthening to ar, in order to win a real parallel for the connection of çaraṇa with çri. Such a subsequent strengthening would yield, in the case of çṛ (from çru), forms like *açar[t] as equivalent of açrot, or *çaraṇa as equivalent of çravaṇa and co-ordinate with it.

2 *b*. If the connection of çaraṇa with çri be upheld, we shall have to find support for series somewhat like these:

çray-aṇa	: çri	: * çṛ-ta	: çar-aṇa (?)	: *açar (= açret),
çrav-aṇa	: çru	: çṛ-ṇumas	: * çar-aṇa	: *açar (= açrot).

That is, from an unsupported çṛ as equivalent of çri we have to derive a form çaraṇa, which with the already existing çrayaṇa makes a pair of doublets which are, so far as I know, without example.

2 *c*. The co-existent forms of the root for 'boil,' çṛta, çrāta, and çrīta, have no bearing on this case. Here the simplest root-form is çṛ. This is related to çrā just as i to yā, pṛ to prā, and the many others discussed by Brugmann, *Morphologische Untersuchungen*, i. 1–91; see especially p. 40. The weakening of long ā to long ī is a common thing in Sanskrit. The i of çri is original (and not a weakening within the Sanskrit), as is shown by the cognates κλίνω, AS. *hlinian*, Eng. *lean*, etc.

[1] This phenomenon is at best sporadic: see Whitney's Grammar, § 243. It is probably explained, in the first of the cases cited (ri), by the i of the subsequent syllable, and in the other case (ru), by the u of the class-sign. The form tṛtá indeed occurs in several places of the Atharva-veda, but it is not well vouched.

II. Secondly, the meaning. The root çri does indeed mean 'lean against *or* on,' and so 'rest on, depend upon *or* betake one's self to, *especially* for refuge or protection.' Aside from the difficulty of the form, then, çaraṇa might very well mean primarily 'a leaning upon *or* taking refuge with for protection,' and, secondarily, but much less naturally and easily, by a transfer of meaning from the action to the thing acted upon, 'one's leaning, *i.e.* that on which one leans, one's support *or* protection.'

The development of meaning from 'protecting' to 'that which protects' is an example of one of the commonest of all the transitions of meaning; the reverse development (from the substantive to the adjective) is exceedingly rare. And yet we find çaraṇa, in the sense 'covering *or* protecting,' used to describe a shelter, a tree, houses, and a goddess (çarma, vṛkṣam, gṛhāsas, devī). These uses are Vedic; and, unless we leave them quite out of account, we must consider the original and primary meaning of çaraṇa to be active and transitive, 'covering, protecting,' and the development of meanings must start from this one as the first. And since çri is in all its uses most clearly intransitive, I see no way of connecting the primary meaning of çaraṇa with çri.

It may be added that çarman is described by such adjectives as uru, 'wide-extended,' saprathas, 'with breadth, *i.e.* far-reaching,' achidra, 'without a hole, *i.e.* continuous,' and so on. These show that çarman is not 'a support against which one leans,' but rather 'a cover *or* shelter spread over one.' And of course çarman is from the same root as çaraṇa.

III. The words çaraṇa, çarman, āçāra, and çālā may be more satisfactorily explained, I think, as derivatives of a root çṛ, 'cover, protect.' This root does not show any verbal forms in Sanskrit; but it is abundantly authenticated, as respects both its form and meaning, by a considerable group of words from the Sanskrit, Greek, Latin, and Germanic.

Each of the Sanskrit words, as a derivative of çṛ, 'cover,' is perfectly normal both in form and meaning. The interchange of r and l within the Sanskrit is so common that further comment on çālā is needless. The cognates from the other languages show the regular consonant-changes. Sanskrit ç represents Indo-European k^2, and this answers to κ in Greek, to *c* in Latin, and to the aspirate *h* in Germanic.

In Greek we have καλιά, 'hut, barn,' which agrees perfectly with çālā. Compare the Eng. phrase *get one's hay under cover*, i. e. 'into the barn.' In essentially the same sense and with corresponding form occurs the AS. *heal*, Eng. *hall*. Again κάλ-υξ (Anglicized *calyx*) is the 'cover, *i.e.* husk *or* pod'; Ger. *Hülle* means 'covering,' and the Eng. *hull* is the 'covering' of the kernel of grain. The cover of the head is called *hel-m* ('helmet *or* head-protector'), and the word is generalized in AS. poetry so as to be used of any protector, as God or Christ.

In Latin we find *oc-cul-ere*, 'cover,' and *cl-am*, 'covert-ly, secretly.' Latin *col-or*, 'color,' is strictly 'that which covers *or* envelops a thing, its outside, its external appearance.'[1] With these belong further the Latin *cēlāre*, Ger. *hehl-en*, Chaucer's *helen*, later Eng. *hele*, 'cover, *i.e.* conceal.' Finally, it may be an extended form of the root in question, which appears in κ$^{\alpha}$λύπ-τ-ω, 'cover.'

[1] Thus the word shows the same transfer of meaning as the Sanskrit varṇa, 'color,' from vṛ, 'cover,' a transfer similar to that seen in the Eng. *coating* or *coat* (of paint).

IV. It remains to speak of çárīra, 'body.'

1. The Hindus give several derivations for the word. The oldest are in the Nirukta, ii.16: çarīraṁ, çṛṇāteḥ, çamnāter vā, i.e. çarīra is from that root çṛ which makes its present çṛṇāti and therefore means 'tear *or* break,' or from the root çam meaning 'hurt.' The latter alternative is wholly impossible on account of the form. The traditional derivation from çṛ, 'break,' is followed hesitatingly by Grassmann, and according to it the body is conceived as 'the breakable *or* fragile part, *das Gebrechliche*.'

2 *a*. The later Hindu books, notably the introduction to Manu and the corresponding passage of the Mahābhārata,[1] derive the word from çri, 'lean,' and explain the body as that on which the more subtile parts of man lean or are dependent for their manifestation.

2 *b*. The German lexicographers quote a passage from the Aitareya Brāhmaṇa, ii. 14: açarīraṁ vāi reto, 'çarīrā vapā. yad vāi lohitaṁ yan māṅsaṁ, tac charīram. This shows that the çarīra is distinguished from the soft viscera and inward fluid secretions. They therefore define the word as meaning 'the firm *or* solid parts of the body, *Knochen-gerüste*,' and, following the later Hindu derivation from çri, 'lean,' interpret the word etymologically as 'the support *or* prop' of the softer parts.

3. On the other hand, giving equal weight to the Brāhmaṇa passage, we see that we can no less easily interpret "the firm red flesh with the bones" as 'the hollow cover, the tegument *or Hülle*' of the viscera, etc. The form is easily connected with çṛ, 'cover,' being made like gabhīrá, 'deep,' and çávīra, 'strong'; see Whitney, 1188 e[2]. Even on the score of the interpretation the last view has something in its favor, while, in view of the difficulty of connecting çarīra as a *form* with çri, it is far the more acceptable.

The Vedic literature plainly distinguishes the çarīra from the vital breath or the immortal soul. Of this latter, the çarīra is the 'cover *or* envelope'; and this interpretation becomes natural and easy in view of the analogous German phrase which calls the body the *sterbliche Hülle*, 'the mortal cover *or* envelope' of the soul, 'the corporeal tegument.' In a somewhat similar manner, as Dr. Scott suggested, the Anglo-Saxon poetry calls the body the *bān-hūs*, 'bone-house,' and *bān-fæt*, 'bone-vat.'

Remarks were made upon this paper by Professor Whitney, Dr. Scott, and Dr. B. W. Wells.

The Association adjourned to 8 P. M.

HANOVER, N. H., Tuesday, July 8, 1884.

EVENING SESSION.

The first Vice-President, Professor Tracy Peck, of Yale College, New Haven, Conn., called the Association to order in Chandler Hall, where a large audience had gathered, to listen to the address of the President, Professor D'Ooge.

[1] Boehtlingk and Roth give the citations: Manu i.17, MBh. xii.8521. The latter = xii.233.11, folio 89 b, ed. Bombay.

4. The Historical Method and Purpose in Philology.[1]

The address opened with a brief review of the most noteworthy contributions to the different departments of Philology that have appeared during the current year. Special mention was made of the following: — In English philology, the first fasciculus of the Historical Dictionary of the English Language; the publication by the Early English Text Society of the facsimile of the Epinal Glosses; Sweet's print of Lord Tollemache's famous MS. of King Alfred's Anglo-Saxon translation of Orosius; the publication of an American series of Anglo-Saxon text-books, including Beowulf and Caedmon. In Teutonic and Romance philology, Kluge's Etymological Dictionary of the German Language; Verdam's Dictionary of the Middle-Dutch; Körting's Encyclopaedia of Romance Philology; the *Opuscula* of Diez. In Oriental philology, the monograph of Friedrich Delitzsch on the Hebrew Language as viewed in the light of recent Assyrian researches; the second and third parts of Brugsch's *Thesaurus Inscriptionum Aegyptarum*; a Siamese Grammar, by Rev. S. C. George, in course of preparation. In Indo-European philology, Whitney's work on Sanskrit Verbs, now in press; the Sanskrit Reader of Lanman, which is the first text-book in Sanskrit bearing the imprint of an American publisher that has ever appeared. In classical philology, the contributions to historical syntax under the direction of Schanz in Germany, and of Gildersleeve in this country; the appearance of the first *Heft*, entitled *Archiv für Lateinische Lexicographie und Grammatik*, of the *Thesaurus Linguae Latinae*, which is to be edited under the direction of Wölfflin, and with the aid of the Munich Academy; Vols. IX. and X. of the *Corpus Inscriptionum Latinarum*; the *Inscriptiones Graecae antiquissimae praeter Atticas in Attica repertas*, by Roehl; another instalment of the new *Corpus Inscriptionum Atticarum*; Part II. of the collection of ancient Greek Inscriptions in the British Museum, by Newton; Westphal's treatises on the Rhythmic of Aristoxenus and on ancient Greek Music; Monro's Homeric Grammar.

Attention was called also to the first publication of the Catalogue of the Greek and Latin MSS. of the Vatican library, of which two volumes have recently appeared, and to the projected publication of the catalogue of the famous Orsini library in Rome, which is said to contain many classical MSS. and several early printed texts marginally annotated by scholars of the fifteenth and sixteenth centuries. The speaker also referred to the archaeological surveys and explorations of the year, more particularly those made by Dr. Ramsay, assisted by Dr. Sterrett of the American school at Athens; and congratulated American scholars upon the successful opening of the American school and the work at Assos by the Archaeological Institute, both of which institutions give promise of doing much for the honor of American scholarship, and of promoting the study of classical philology in this country. From this rapid sketch the speaker inferred two facts: (1.) the rapid accumulation of the material of philological study, and (2.) the growth of the historical method and spirit in its pursuit. These facts suggest the theme of the address: *The historical method and purpose in Philology.*

Philology may be defined as the scientific research into the history of man, revealed in language, literature, and art (using "art" in its widest sense). This idea of philology can best be gained from tracing its history and development. The epochs of this history are marked by the names of Scaliger, Bentley, Heyne, Wolf, Bopp, Hermann, Boeckh, and Ritschl. The speaker then characterized

[1] The address is printed in full in the *New Englander*, Vol. XLIII. No. 186 (November, 1884).

the work of each of these scholars. Scaliger was the polyhistor "of infinite reading"; Bentley gave the first example of objective literary and historical criticism; Heyne and Wolf were the first to separate philology from the study of theology, and to make it a separate and more or less complete science in itself. Under Heyne and Wolf philology received its greatest impulse on the archaeological and historical side. Hermann emphasized the grammatical and critical side. Then came Boeckh, whose weight was thrown on the opposite side, that of *realien* and antiquities.

The conflict between the schools of Hermann and Boeckh was described, and it was shown that these two diverse tendencies were after all harmonious in that they worked for a common aim, — the prevalence of an objective and sound method in philology, the historical method. Hermann's historical sense in the treatment of mythology and of metre, and Boeckh's influence in co-ordinating the various departments of philological study, and in relating philology with history, were more fully detailed. Special mention was also made of Boeckh's contributions to our knowledge of antiquities, and to his services as the founder of epigraphy by his *Corpus Inscriptionum Graecarum*.

Attention was next directed to the great influence of the comparative method upon all philological research. This method is essentially the historical and inductive, and is the fruit of comparative philology, whose founder is Franz Bopp. Its earliest and best results thus far have been reaped in the study of linguistics; but the same method is being applied to the study of mythology, of metre, and of antiquities. In the study of mythology, especially, the comparative-historical method has wrought great changes. Compare, for example, such a work as Creuzer's *Symbolik* with the writings of Preuner, Weber, and Roscher.

The address next went on to show how philology in the time of Boeckh was still somewhat vague and indefinite in its aim and scope, and was in danger of becoming simply an auxiliary discipline of history. The scholar to whom belongs the credit of defining the true bounds of this science, and of organizing its parts into one living unit, was Ritschl. He insisted with Boeckh that philology aims to be "the reproduction of the life of classical antiquity through the recognition and contemplation of all its essential representatives and utterances," but he maintains that this reproduction is especially directed to the preservation and restoration of *literary* monuments. Thus he separates philology from general history, while at the same time he makes all philological studies in a certain sense historical. Ritschl affords the best illustration hitherto known of the historical method in philology. He defines this method as inductive and progressive. "No event in the history of civilization springs from the ground all complete, but is conditioned by previous processes, and grows in connection with a steady movement onward." Ritschl applied this principle to the treatment of every question. His method was not alone objective, but also comprehensive. It was his constant effort to place his pupils in the possession of a vivid acquaintance with the whole life of classical antiquity in all its features. Recognizing the fact that the productive study of classical philology must always take its departure from the critical knowledge of the literature, he also insisted that we must know all the conditions of the culture and life of a people before we can properly know and interpret their literature.

After this sketch of the development of philology, the speaker inquired what this historical method may accomplish for philology to-day. As characteristic of

the condition of this science to-day he mentioned and illustrated four facts: — (1.) The present unsettled state of many questions in philology. (2.) The vast increase in the material of study, and the new light which is falling upon many points that were supposed to be clearly understood and had been dismissed from discussion. The restatement of many questions is due also to the tendency to treat philology as an exact science. (3.) The absence of systematic co-operation and of co-ordinate advance. This is due to the specializing tendency of our day. This tendency must be counteracted in the interest of true science. (4.) Growing out of this is the failure properly to relate our science with the sciences of the day, and with modern life as a whole. The present discussion as to the place of Greek in a liberal education is at bottom the strife between the ancient and the modern, that comes to issue most sharply here.

The solution of these difficulties and the furtherance of philology is to be found in the recognition and pursuit of philology as a historical science in its widest sense. All special and narrow studies must be pursued and inspired with the aim to interpret some literary or historical monument. We must distinguish between the mere chronicler, the mere linguist, and the philologist. The chronicler is content with recording the simple fact as a fact, and in that sense the mere linguist is a chronicler and not a philologist. To the true philologist every fact, whether of language or of art, of custom or of belief, stands not barely for itself, but is clothed, so to say, with the flesh and infused with the blood of that organic life, of which it is at once an expression and a producing cause. The historical purpose in philology can alone give our science its place in the interest of men of to-day. The speaker thinks that especially in America a broader view of philology needs to be cultivated, and its historical side made more prominent. No one can dispute that our American scholarship in philology has been one-sided. Archaeology and interpretation have had little place in the discussions of the American Philological Association. This fact has been commented on by the *Revue Critique*. Linguistics predominates. Our peculiar situation has something to do with this; we have no original documents, no inscriptions, no ruins, to collate, to interpret, and to explore. But the work of the Archaeological Institute of America, and of the American School of Classical Studies at Athens, and the enterprise of the London Society for the promotion of Hellenic learning, promise to put into our hands facsimiles of MSS. and original sources of information.

But to popularize the study of philology among us, we need to make evident the truth that this science is vitally connected with the culture of our own times, and can produce the noblest character. And to do this, the study of philology must be infused by the historical spirit which makes the present the child of the past, and the parent of the future.

The Association adjourned to 9 A. M.

HANOVER, N. H., Wednesday, July 9, 1884.

MORNING SESSION.

The President called the Association to order at 9.30 A. M.

The Secretary read the minutes of Tuesday's sessions, and they were approved.

Professor R. B. Richardson, of Dartmouth College, announced that Mr. and Mrs, Hiram Hitchcock would be happy to receive socially at their residence the members of the Association, with their friends, on Wednesday evening, at 8 o'clock.

On behalf of the managers of the Passumpsic Railroad, Professor Richardson extended an invitation to the members of the Association and their friends to join in a pleasure excursion on Friday to Lake Memphramagog.

Both of these invitations were accepted, with thanks.

The President introduced Professor R. C. Jebb, of the University of Glasgow.

Professor Jebb spoke with pleasure of the kindness with which he had been received in our country. He alluded to the oft-made criticism that the work of American scholars concerned itself too much with grammatical and linguistic subjects, and was too often in statistical form. While admitting that such studies might be carried too far and so displace the study of antiquity in its more directly humanizing aspects, he yet enforced the dignity and worth of these severer pursuits as a necessary preliminary for the fruitful study of ancient life and thought.

He added, that the occasions for this criticism were being taken away by the activity of the American archaeologists, who had already achieved such important results at Assos. He spoke of the bright possibilities (as, for instance, at Assos and Babylonia) for American scholars in the future. He concluded by referring to the series of photographic reproductions of the most famous classic manuscripts, such as the Laurentian Sophocles and the Ravenna Aristophanes. These phototypes are fully as good as the originals, and suggest the possibility of studies in palaeography and text-criticism in America under circumstances no less favorable than those of the young German or English student.

The reading of communications was then resumed, at 9.55 A. M.

5. On the Use of the Genitive in Sophokles, by Thomas D. Goodell, Ph. D., of the Hartford High School, Hartford, Conn.; presented by Professor T. D. Seymour, of Yale College.

The aim of the paper was to give, with accompanying statistics, a view of the use of the genitive in the extant plays of Sophokles. From the fragments only such examples were taken as seemed especially noteworthy or significant, and these were not included in the statistics. Incidentally an attempt was made to work out a somewhat better classification than the grammars employ.

As the Greek genitive is a compound case, resulting from the fusion of a part of the ablative with the original genitive, the case should, as far as possible, be treated as two. Accordingly the usage of Sophokles was considered under the following heads: (1.) true genitives, (2.) ablatival genitives, (3.) genitives whose origin and nature are doubtful. For convenience, genitives with prepositions, belonging in all three classes, were treated last.

Under the genitive proper are to be classed 53.6+ per cent of all the genitives in Sophokles, 46.3+ per cent of all being adnominal. The usual varieties of adnominal genitive appear, but no statistics can be given for the genitive subjective, objective, partitive, genitive of possession, material, etc., because no complete subdivision on this basis is possible. The genitives with superlatives were separately enumerated, as were also genitives of the whole dependent on adverbs. The adnominal genitive in the predicate was shown to occur with fourteen or fifteen verbs, the most common being *εἰμί*. The peculiar usage illustrated in nine passages (Ai. 1236 f., O. T. 102, O. K. 355, 662, El. 317, Tr. 339, 928, 1122, Phil. 439 ff.) was explained as a development of the predicate genitive. With these also were classed the genitives translated by "about," with *ἀκούω*, *κλύω*, and *πυνθάνομαι* (O. K. 307, 485, 514, Ant. 1182, El. 35, 481, Tr. 65). Of all the true genitives, 23.3+ per cent occur in lyric lines.

The ablatival genitives, including those of separation, of source, of agent, of cause, of comparison, but not including those with prepositions, are 11.2— per cent of all. The genitive of separation is especially frequent. It occurs with not far from one hundred and fifty words and phrases denoting motion away from or out of, failure, deprivation, distinction, and the like, among which are many simple verbs, such as *ἄγω*, *βαίνω*, *μολεῖν*, *ἔρχομαι*, *κηκίω*, *πίπτω*, *στείχω*, *φέρω*. Of ablatival genitives 17.1+ per cent are lyric.

Genitives whose origin and development cannot be traced with certainty are found with a large variety of verbs and adjectives. They belong chiefly to proethnic types, and are not easily classified; but the total number of examples is comparatively small, 9.4 per cent of all, distributed between verbs and adjectives in the proportion of 7.3— to 2.1+. Of those with verbs, 16.1— per cent are lyric; of those with adjectives, 23.0 per cent are lyric.

Among prepositions, *ἀπό*, *ἐξ*, *παρά*, *πρό*, *πρός*, and *κατά* in the single phrase *κατ' ἄκρας* occurring thrice, were regarded as governing the ablatival genitive. With these are found 15.0 per cent of Sophoklean genitives. With the quasi-prepositions *ἄνευ*, *ἄπωθεν*, *ἄτερ*, *ἄτερθε*, *δίχα*, *ἐκτός*, *ἔξω*, *ἔξωθεν*, *λάθρα*, *πάρος*, *πάροιθεν*, *πέρα(ν)*, *πλήν*, *πρόσθεν*, *χωρίς*, occur 2.4— per cent, which are to be added to the ablatival class. In the former subdivision 14.0— per cent are lyric; in the latter, 18.5+ per cent. *ἀμφί*, *ἀντί*, *διά*, *ἐπί*, *κατά*, *μετά*, *μερί*, *ὑπέρ*, and *ὑπό* (*ὑπαί*) govern only 2.4— per cent, of which 18.0+ per cent are lyric; *ἀγχί* (*ἄσσον*), *ἀντίον*, *διαμπερές*, *ἐγγυτέρω* (*ἐγγυτάτω*), *εἵνεκα*, *ἔνδον*, *ἔνδοθεν*, *εἴσω* (*ἔσω*), *ἕκατι*, *ἐναντίον*, *ἔνερθεν*, *καθύπερθεν*, *κάτω*, *μεταξύ*, [*μέχρις*,] *ὄπισθεν*, *πέλας*, *πλησίον*, govern 1.6+ per cent, of which 9.0+ per cent are lyric.

The most striking fact brought out by these figures is that no less than 28.6 per cent of the genitives in Sophokles are ablatival, while only 17.8— are to be classed as of doubtful character. Several questions suggested by the detailed statistics cannot be answered without similar statistics for other authors, which have not yet been collected.

Remarks upon this paper were made by Professor Jebb. He deemed it a most valuable one, and hoped that it would be printed.

6. On Hanging among the Greeks, by Professor Seymour.

Soph. O. T. 1371 ff.: —

> ἐγὼ γὰρ οὐκ οἶδ' ὄμμασιν ποίοις βλέπων
> πατέρα ποτ' ἂν προσεῖδον εἰς Ἅιδου μολών,
> οὐδ' αὖ τάλαιναν μητέρ', οἷν ἐμοὶ δυοῖν
> ἔργ' ἐστὶ κρείσσον' ἀγχόνης εἰργασμένα.

Eur. Alc. 226 ff.: —

> αἰαῖ αἰαῖ, ἄξια καὶ σφαγᾶς τάδε,
> καὶ πλέον ἢ βρόχῳ δέρην
> οὐρανίῳ πελάσσαι.

Eur. Bacch. 246 f.: —

> ταῦτ' οὐχὶ δεινῆς ἀγχόνης ἔστ' ἄξια,
> ὕβρεις ὑβρίζειν ὅστις ἔστιν ὁ ξένος;

Eur. Heraclid. 243 ff.: —

> εἰ γὰρ παρήσω τόνδε συλᾶσθαι βίᾳ
> ξένον πρὸς ἀνδρὸς βωμόν, οὐκ ἐλευθέραν
> οἰκεῖν δοκήσω γαῖαν, Ἀργείοις δ' ὄκνῳ
> ἱκέτας προδοῦναι· καὶ τόδ' ἀγχόνης πέλας.

Commentators use these passages to explain each other; but while some understand ἀγχόνης ἄξια as "so bad as to deserve the penalty of hanging," others understand it as "worse than death," i. e. "which I would rather have died by strangling than do." We are assisted to a choice between these interpretations by a consideration of the history of hanging among the Greeks. It is a familiar fact that hanging was the favorite method of suicide by Greek women in the early ages. So died the mother of Odysseus, Anticleia, and Iocasta; so Leda in her shame for Helen (Eur. Hel. 136), so Phaedra, so Antigone, so the daughters of Lycambes. Peleus's wife, Antigone, hangs herself (Apollod. iv. 13. 3). Hanging is proposed for themselves by the suppliants in Aeschylus, and to Helen by Hecuba (Eur. Troad. 1012). Hermione attempts it (Eur. Andr. 811). Clytaemnestra tells her husband on his return (Aesch. Ag. 842) that the noose has often been taken from her neck which she placed there in her desperation. Erigone (Dictys, vi. 4), daughter of Aegisthus and Clytaemnestra, hung herself when she heard of the acquittal of Orestes by the high court at Athens. Other modes of suicide by women were uncommon. The only mythical instance of suicide by poison which has fallen in my way is where the sorceress Medea considers whether she shall take poison (which was quite in her line of business) or the halter (Ap. Rhod. iii. 789). Some few women hurled themselves from rocks.

Doubtless men also hung themselves. This is indicated by Simonides of Amorgos, i. 18: Old age seizes some, diseases wear out others, Ares sends others beneath the ground, others perish in storms on the sea, —

> οἱ δ' ἀγχόνην ἥψαντο δυστήνῳ μόρῳ
> καὐτάγρετοι λείπουσιν ἡλίου φάος.

Here hanging is used for all kinds of suicide, just as in the Alexandrian period, when suicide by starvation was so popular, ἀπέχεσθαι, "to refrain," and ἀποκαρτερῆσαι, came to be used for all suicides. Cf. Suidas, ἀποκαρτερήσαντα· ἑαυτὸν ἢ λιμῷ ἢ ἀγχόνῃ τοῦ βίου ἐξαγαγόντα. But even in the Alexandrian period, hanging seems to have been the favorite mode of suicide for lovers, as Theoc. iii. 9. Suicide by hanging was known at an early time in Rome. Servius on Verg. Aen. xii. 603, (Purpureos moritura manu discindit amictus ‖ et nodum informis leti trabe nectit ab alta,) says that the Pontifical Books directed the corpses of those who hung themselves to be cast out unburied. Bardes, quoted by Eusebius, Praep. Ev. i 320, says of the Germans, Γερμανῶν οἱ πλεῖστοι ἀγχονιμαίῳ μόρῳ ἀποθνήσκουσιν. In Eur. Or. 1036, Orestes mentions the halter or the sword as the last resort of his sister Electra and himself, but he assumes that he will choose the sword. The earliest instance that I find in Greek literature of a man's hanging himself is that of Pantites, one of the three hundred who was sent away from Thermopylae as a messenger, and hung himself from shame at having no part in the battle. Neophron, in his *Medea*, made his heroine prophesy that Jason would hang himself: —

> φθερεῖ τέλος γὰρ αὐτὸς αἰσχίστῳ μόρῳ
> βροχωτὸν ἀγχόνην ἐπισπάσας δέρῃ.

Another instance is the man who kicked Socrates, according to the story of Plutarch, and hung himself to escape his nickname ὄνος. So the Corcyraean nobles hung themselves (Thuc. iv. 48) when surrounded by the democracy. Strepsiades contemplates the act in order to avoid a suit at law. Heracles suggests it to Dionysus as a way of reaching Hades. Iocasta says of Oedipus (Eur. Phoen. 327 ff.), ὁ πρέσβυς ὀμματοστερής | ἀνῆξε μὲν ξίφους | ἐπ' αὐτόχειρά τε σφαγάν | ὑπὲρ τέραμνά τ' ἀγχόνας. Cf. Apost. xvi. 72, τί οὐκ ἀπήγξω ἵνα Θήβῃσιν ἥρως γένῃ; In general, however, men seem to have been more ready to fall on their swords, or to stab themselves, or to poison themselves with what was said to be bull's blood.

But common as hanging was as a method of suicide, I can find no trace of it as a punishment in the early ages. The act of Telemachus (Hom. χ 462) can hardly be considered normal, when he refuses a pure death to the unfaithful maids, and, making many nooses in a ship's cable, strings the women up in a row. When the Greeks wanted to put a man to a speedy death, corresponding to hanging to a lamp-post or to a tree in our times, they used to stone him. This act of violence, indicated in Hom. Γ 57, is frequently mentioned in the tragedies, and occurred at least as late as the Persian wars at Athens. When hanging is threatened, as by Creon (Soph. Antig. 309), evidently it is not designed that the man should be hung by the neck until he is dead; the hanging is to *precede* death, as a torture; as among the Jews hanging *followed* death, as a disgrace. One apparent arrangement for penal hanging is mentioned by Dem. cont. Timoc. 744: among the Locrians, the man who proposed a new law did so with his head ἐν βρόχῳ, and, if the law failed to pass, τέθνηκεν ἐπισπασθέντος τοῦ βρόχου. But this is hardly judicial hanging; and the same can be said of Alexander's act when he hung some Brahmins in India, Plut. Alex. 59 *fin.* Agis IV. and his mother were hung or strangled (Plut. Agis, 20); but this was late, about 240 B.C. Where Plutarch (Themist. 22) speaks of the ropes τῶν ἀπαγχομένων, it is uncertain whether the participle is middle or passive, — the ropes with which men

were hung or those with which they hung themselves. This word also is used of the bowstring as well as of the halter.

Instances of hanging as a punishment are late or uncertain. A proverb (Paroem. i. 454) says that, under the Thirty Tyrants, the man condemned to death died by sword, *halter*, or hemlock. But this is unsupported by other testimony, although opportunities are offered for the mention of the halter, if it were then used, in Xenophon and the orators; and this *triad* of punishments does not embrace death by *clubbing*, which probably was then practised.

A strong presumption is thus raised against what seems to be the common interpretation of Soph. O. T. 1374, which passage can hardly be separated from the other three quoted at the head of this article. The expressions, ἄξια σφαγᾶς and ἀγχόνης ἄξια, must refer to suicide, and are then excellent illustrations of the original use of ἄξιος, as μνᾶς ἄξιος, properly equivalent to μνᾶν ἄγων. So in Homer ἄξιος is regularly used like ἀντάξιος. Failure to recognize this has led to much unprofitable discussion of Hom. α 318: σοὶ δ' ἄξιον ἔσται ἀμοιβῆς. The original use is preserved very naturally in the proverbial expressions which are treated in this paper.

The later figurative uses of ἀγχόνη were briefly discussed.

Remarks upon the paper were made by Professors Lanman, D'Ooge, and Jebb.

7. On Primary and Secondary Suffixes of Derivation and their Exchanges, by Professor W. D. Whitney, of Yale College, New Haven, Conn.

All structure in language is the joint product of combination and adaptation. The beginnings of speech are roots, or speech-signs having no formal character; then nothing different is possible save by the putting together of these; and observation shows abundantly how the process issues in form-making.

But combination does not necessarily make forms. It is doubtful whether all dissyllabic roots, and even all monosyllabic roots of composite form, are not products of combination. To make a form, there must be a class of words in which a common part adds a preceptible like modification of meaning to the various elements to which it is appended. So *like* is formative in *godly* and *truly*, etc., but not in *such* and *which* (from *so-like* and *who-like*); these are not less radical elements in English speech than are *this* and *mine;* and so with the *pre* contained in *preach* (*predicare*) and the *con* in *cost* (*con-stare*), and in other like cases. It is a great error to assume that roots demonstrably reduced from a fuller form are necessarily relics of grammatical forms. While thus there is combination without forms, but no form-making without combination, adaptation may be active in all stages of language-growth without exception. No forms are possible without an adaptive alteration of the original value of the formative element, such as is seen in the reduction of *like* to the adverbial ending *ly*, of the Latin noun *mente* to an adverbial suffix in Romanic, of *habeo*, 'I have,' to a Romanic future ending, and so on. The same adaptability is seen in all auxiliaries and form-words, in phrases, in moral and intellectual terms, and everywhere else in language; it is a universal characteristic of all speech-material, and dependent on the nature of that material as conventionally significant, and therefore applicable to all the new uses that convenience suggests. It is in greater or less measure shared by

languages that have no formal structure; it is seen, for example, in the Chinese distinction of "full words" and "empty words": that is, some words are by the mere assignment of usage made to play a subordinate part as indicators of relations, etc.; or are (like our own *be* and *have*) now principal and now subordinate. The earliest important (probable) case of this kind in Indo-European language-history is the distinction of pronominal from other roots; this seems to have been the result of a gradual dissimilation and attenuation of meaning, prior to all formal development. Other instances are the gradual distinction of adjective from substantive, of adverb from case-form, of preposition from adverb, of relative from demonstrative or interrogative pronoun, and so on. Allowing for these, the positive growth of our languages is reduced to verb-inflection, noun-inflection, and stem-making by derivative suffixes. Here also original sameness and gradual distinction by use is to be confidently assumed: the difference of verb-form and noun-form even is doubtless the result of differentiation; so also endings of derivation and of inflection must have been originally of one class. These are conclusions not now demonstrable, but fairly deducible by analogical reasoning. As to the distinction of derivative suffixes into primary and secondary, or those added directly to roots and those added to derivative stems, though in present language a well-marked and important one, it is clearly of later establishment, a part of the general process of inorganic differentiation, or by usage alone. It was the main object of the paper to set this forth, by showing, through the means of examples taken from the Sanskrit, the free convertibility of suffixes of the one class into suffixes of the other class. Prominent examples are the suffixes making gerundives, or future passive participles. The gerundive *karanīya* '*faciendus*,' for example, is clearly demonstrable to be a secondary formation, from *karana* ('*factio*') + *īya*, and not from √*kar* + *anīya*. The equivalent *kartavyà* is likewise from *kartu* + *ya*, not √*kar* + *tavya*. In the light of these analogies, it appears altogether probable that *kārya* and all its kindred, claimed to be made with suffix *ya* added to the root, are really from noun-stems: thus, *kāra* + *ya*, and so on. Certainly, the great majority of them are of this character. All these derivatives, now, have assumed in later Sanskrit a primary character (and those in *ya*, even in the earliest known form of the language).

Various other cases of the same kind were noticed and explained: as, the derivatives in *in*, in *aka*, in *uka*. The opposite case, of transfer from primary to secondary office, though it would seem the easier of the two, is much less fully illustrable from Sanskrit. The best examples are the suffixes of comparison *īyas* and *iṣṭha* (the latter, at least, probably compound), which have only in small measure won a secondary character; *man* or *iman*, forming abstract nouns, but only of limited currency; and the quasi-participial *ta*, which through its use as making participles of denominative verbs has come to be a secondary suffix of possession or affection, precisely like the English *-ed* in such words as *blear-eyed*, *four-sided*.

These instances are at any rate enough to illustrate the movable nature, dependent on changes of usage, of this particular division-line in grammar. Though itself of minor importance, it instances and exemplifies a truth of wide and deep significance in the history of language.

8. On Latin Glossaries, with especial reference to the Codex Sangallensis, No. 912, by Professor Minton Warren, of the Johns Hopkins University, Baltimore, Md.

The renewed interest of late years in the subject of Latin Glossaries is largely due to the efforts of the late lamented Dr. Gustav Loewe, who published in 1876 his *Prodromus Corporis Glossariorum Latinorum*, and up to the time of his death was diligently engaged in collecting materials for a grand *Corpus*. These collections have now passed into the hands of Loewe's colleague, Professor Georg Goetz of Jena and the Königliche Sächsische Gesellschaft der Wissenschaften is to furnish the means for the further prosecution of the undertaking. A copy of the Codex Sangallensis, 912, was made by the writer of the paper, at the suggestion of Dr. Loewe, in the summer of 1881. It is one of the oldest glossaries, belonging to the eighth, or perhaps to the latter half of the seventh century. In form duodecimo, it contains 320 pages, with an average of about 16 glosses to the page, and altogether has 5153 glosses, of which the largest number (626) fall under the letter C, while P has 525, and S 456. Of this codex Loewe (*Prodromus*, p. 139) says: "Cum codicibus Vaticano (3320) Vindobonensique (2404) consentit etiam codicis Sangallensis 912 praecipua glossarium materia. Sangallensis praeter Vaticanum 3321 omnium codicum quotquot hac usque noti sunt vetustissimus." Most of the words are Latin, and all are explained in Latin. There are many Greek words in Latin transliteration, and there are a few Hebrew words, mostly proper names drawn from the sacred writings, and, singularly enough, one Gothic word, *baltha: audax*, p. 32. On the margin *Gothice* is written.

The glossary begins on p. 4 with "*abba: pater*," and closes with "*Zipherus: ventus.* EXPL. ERMENEUMATA DŌ GRATIAS AMEN."

Some of the interpretations furnish rather amusing etymologies. E. g.: — P. 27, *asparagus: quia virgas habet asperas;* which, however, goes back to Varro. P. 18, *allucinatio, lucis alienatio.* P. 20, *alluvium: quotiens flumen alium sivi meatum facit.* P. 127, *idolum: ex dolo nomen accepit, id est dolo diabuli inventum.* P. 135, *indolis: etas iuvenalis qui dolore nescit.*

A number of instances were given in which the superior reading of the Sangallensis furnishes a clue to the emendation of corrupt glosses found elsewhere. E. g.: —

Cod. Leidensis 67 F', *Depalata: manifestata, devolata.* Cod. 912 has, p. 77, *divulgata.*

Cod. Amplonianus has *Tesserarius: praepositus currorum qui bella nutriunt.* Cod. Sangal. 912 has, p. 293, *Tessarius: qui bellum nuntiat.* Cf. Vegetius de Re Mil. ii. 7.

Cod. Parisinus has *Inspicare: diffidere vel modum spicare.* Cod. Sangal., *Inspicare: defendere et in modo spicarum concidere.* From the two we get the correct reading, *diffindere et in modum spicarum*, etc. Cf. Servius on Verg. Georg. i. 292, and Philargyrius.

Mai (Class. Auct. vi. 550) gives *Veretrum: petosirium.* Cod. Sangal. has, p. 308, *Veretrum: pertusorium.*

Cod. Leidensis 67 F' 1, *Diaria: acibo sed unius diei.* Cod. Sangal., *Diaria: actio sed unius diei.* Cf. Isidorus, Or. i. 63.

In some cases the glosses are very corrupt. E. g.: — P. 31, *bassas: oves.* Cf. Leiden. 67 F', *bassus: pinguis obesus.* P. 116, *gerusa: notrix, conpotrix*, is a corruption of *gerula: nutrix, conportatrix.*

It was sought to establish the following propositions, and to illustrate them from this Codex: —

1. The bad orthography of these glossaries deserves close scrutiny, as it sheds light upon the pronunciation and phonetic changes of a late period, and is therefore of value to the student of late Latin and of the Romance languages.

2. These glossaries contain valuable remains of the words of early grammarians and commentators, often abbreviated and sometimes mutilated beyond recognition, but when properly collated they may be of service to the editors of authors like Varro, Festus, Nonius Marcellus, etc.

3. These glossaries contain many words which, though they cannot be found in any Latin author, may justly be claimed as the property of the Latin language, and, having passed the tests of criticism, even be assigned to definite periods.

4. In the interpretations themselves much material will be found of service to the student of late and vulgar Latin, and in the second instance to workers in Romance. One may see what common classical words went out of use, and what words replaced them.

On motion, the Chair appointed a committee, consisting of Professors Whitney, Owen, and Perrin, to recommend a suitable time and place for the next meeting.

On motion, the Chair appointed Professors T. D. Seymour, Minton Warren, and J. W. White a committee to nominate officers for the ensuing year.

An invitation was extended to the members, through Professor Louis Pollens, to visit the Library of Dartmouth College in Reed Hall.

After several announcements by the Secretary, the Association adjourned till 2.30 P. M.

HANOVER, N. H., Wednesday, July 9, 1884.

AFTERNOON SESSION.

The Association was called to order at 2.30 P. M.

9. On the Relation of the Anglo-Norman Vowel-System to the Norman Words in English, by Professor Hans C. G. von Jagemann, of Earlham College, Richmond, Ind.

The introduction of Latin elements into the English language is due to four principal causes: the occupation of Britain by the Romans, the conversion of the Britons to the Christian Church, the conquest of England by the Normans, and the revival of learning. We are therefore accustomed to speak of these elements respectively as Latin of the first, second, third, and fourth period.

This division is unsatisfactory. It accounts, for instance, for *leal* and *loyal* on the one hand, and *legal* on the other, the first two being Latin of the third period, and the third, Latin of the fourth period; but it fails to explain the doublet *leal* and *loyal*. A similar group is *peer*, *pair*, and *par*, and others might be mentioned. Again, there is a class of words, a fair specimen of which is *require*, which is decidedly classical Latin in form, and which we should therefore suppose to belong to the Latin of the fourth period; yet it is found in Chaucer. Subdivisions

of the above classes are therefore needed, if we wish to account for the various forms in which Latin words appear in English.

The words belonging to the first two classes are few in number, and well known; the third class is the most important one, the words belonging to it being very numerous, and next to the Anglo-Saxon the most important element in the English language.

At the time of the Norman conquest there was no French language in the modern sense of the word, but instead of it we have a number of dialects, the principal ones being the Norman, the Picard, the Burgundian, and the dialect of Île-de-France. These four dialects must be regarded as independent developments of the Low Latin, and not as grown out of a common French type.

The French words which were introduced into English during the first centuries following the Norman conquest came of course directly from the Norman dialect, or rather from that particular species of it known as the Anglo-Norman. Now in consideration of the great differences which existed between the phonetic system of the Anglo-Norman dialect and that of the Old French proper (or dialect of Île-de-France), we must look in the Anglo-Norman for the original types of these words. This has been generally overlooked by English etymologists. Mr. Skeat, in his Dictionary, usually derives English words from their Île-de-France cognates, without accounting for the strange changes which their pronunciation and spelling must have undergone, were they to be derived in that way. A knowledge of the peculiar forms which these words had in Anglo-Norman will show at once that the original Anglo-Norman forms have as a rule been remarkably well preserved, making allowance of course for the changes which the English phonetic system in general has undergone since the Norman conquest, particularly by the mutation of vowel sounds.

The object of this paper was to show in detail how far the influence of the Anglo-Norman vowel-system extends, and it was found that in a general way the present spelling and pronunciation of Norman words in English can be traced back to the Anglo-Norman dialect, irregularities being mostly due to the influence exercised by the analogy of Romance words introduced at other times and belonging to other stages of linguistic development.

10. On Alliteration in Latin, by Professor Tracy Peck, of Yale College, New Haven, Conn.

Alliteration was used throughout the paper in its strictest sense, i. e., as the recurrence of the same initial letter, or its phonetic equivalent, in contiguous words. From a brief historical sketch it appeared that alliteration, though the word is no older than the fifteenth century, was recognized by the Romans themselves as a peculiarity in their diction; that it did not come into the language from an original use by the poets, but that it is found in proverbial and legal and religious phraseology before the rise of formal literature; that though it is prominently found in several prose writers, its frequency is much greater in the poets, especially of the republican period; that it occurs with consonants far oftener than with vowels, and that in poetry its favorite position is at the end of the verse; that, quite exceptionally, related and contrasted ideas naturally fall into alliterative words, so that caution is needed to distinguish unconscious from studied alliteration.

Many examples of evidently conscious alliteration were given to confirm the

argument for the guttural pronunciation of *c* before all vowels; to secure for *o* in all situations its distinctive, unadulterated sound; to distinguish *ae* from *e*, except in the rustic or in very late speech. Instances of the apparently studied juxtaposition of consonantal and vocalic *u* were adduced against the common view that vowels and semi-vowels were not used for alliterative effect.

Numerous citations, mainly from prose writers, seemed conclusively to show that, of two alliterative words, the one containing *a* regularly follows that containing any other vowel, and that, if the words are of unequal length, the shorter tends to precede.

Finally, attention was called to the legitimate use which may be made of alliteration for purposes of textual criticism.

Remarks were made on this paper by Professors Warren and Perrin.

11. On the Monasteries of Mt. Athos, by Dr. Robert P. Keep, of Williston Seminary, Easthampton, Mass.; read by Professor J. H. Wright.

[This paper was prepared by the writer in compliance with a request that he would contribute something which, less strictly technical than most of the papers which are read before the Association, should touch upon some aspects of life to-day in Modern Greece.]

Homer mentions the promontory of Athos only once. Apollonius Rhodius preserves the interesting statement, that at certain times in the year the shadow of the mountain extended at sunset to the island of Lemnos, some sixty miles away. Herodotus gives the names of six cities upon the promontory, and describes how Xerxes cut his canal through the isthmus. Thucydides speaks of the mixed population. The sum of this is that the peninsula has no ancient history of importance. Its history really begins with the organization of monastic life there in the tenth century by one Athanasios, a monk of Constantinople.

The peninsula is some forty miles long, by about four miles broad at its point of greatest width. Distinct traces of the canal of Xerxes are thought still to exist at the isthmus. The peninsula rises toward the south until the rocky ridge which forms its backbone reaches an altitude of two thousand to three thousand feet, and at the extreme southern point towers aloft the peak of Mt. Athos, 6,400 feet high, and conspicuous from all points within a radius of fifty to seventy-five miles. It is visible, it is said, from the island of Euboea and from the plain of Troy. This mountain is not only a cause of thunder-storms and hence a terror to sailors, but it also brings down into the peninsula, of which it is the extremity, the temperate climate, and makes it one of the most beautiful spots upon the face of the earth. The Athos peninsula is abundantly watered, and is full of forest trees of almost every variety. Here are found, at different altitudes and exposures, the chestnut, apple, and orange trees, the grape, and the small fruits of New England.

It is impossible to know how numerous the monastic population may, at certain times, have been. Ten thousand may not be an extravagant estimate. The present number of monks is about two thousand, distributed in twenty monasteries. These monasteries are massive stone structures, the plainness of which is sometimes relieved by several rows of light balconies running across their front. They occupy the most picturesque sites, and appear brilliantly white

from the whitewash with which their exterior walls are covered. Certain features of monastic life are common to all the monasteries. These are as follows:— 1. No female is ever admitted to the peninsula, the so-called Holy Mountain. 2. Meat and eggs are never eaten; wine, however, is allowed, in consideration of the severity of the winter. 3. Attendance at the daily services in the monastery church consumes eight to fifteen hours. 4. The remainder of the time is spent in manual labor. 5. No records of individuals are kept, and no tombstones are placed over the dead.

The twenty convents fall into two classes: the *cenobite* and the *idiorrhythmic*. In the cenobite (*κοινός, βίος*) monasteries, all the monks assemble once a day around a common table, and during their meal a monk reads aloud from a high pulpit from the homilies of the Greek Fathers. In the idiorrhythmic (*ἴδιος, ῥυθμός*) monasteries, the monks do not come together for a common meal, and, except as far as concerns the church services, regulate their lives more according to their own will. The monasteries have, at all times, suffered much from fire, and the age of most of the present buildings does not exceed one to three centuries. These buildings owe their erection chiefly to the pious gifts of wealthy Greek ruling families of the Danubian Principalities (now called Roumania), where they have until recently possessed great estates, from which most of their revenue has been derived. At present, the monks are poor. They own some farms in the Greek islands, and in various parts of Turkey. Occasionally, they make pilgrimages with their relics through Bulgaria, and thus collect money. Large companies of Eastern Christians at times, too, visit the monasteries and leave gifts behind them. The level of intelligence among the monks is low. Many seek the monasteries as a retreat for indolence; a few, as a refuge on account of crimes committed; fewer still, as an act of religious consecration.

Aside from the natural beauty of the spot, what most attracts the traveller is the certainty that here he beholds a place where language, occupations, surroundings, have scarcely changed in five hundred years. Perhaps there may not be another place in the world where the present is so like the past. There is much, also, to interest the lover of mediaeval antiquity. There are paintings of the Byzantine school which antedate the fall of the Eastern Empire, and there are sacred vessels and boxes in which relics are kept, the gifts of Greek Emperors of Constantinople.

It is an interesting question what will become of these monastic communities in the near future, when the Turks shall be forced out of Europe. The best use would certainly be to make educational establishments out of some of the larger monasteries. Three of the monasteries possess libraries of great value. In each of these are stored more than two thousand manuscripts. Experts have pronounced upon them, and have declared that the classical philologist has nothing to hope from a further examination. But the recent discovery by Bishop Bryennios, in a monastic library in Constantinople, of the "Teaching of the Apostles," leads us to hope that some valuable discoveries in patristic Greek literature may reward a thorough examination of these convent libraries by modern Greek Hellenists. Possibly the English Hellenic Society and the Archaeological Institute of America may do something to encourage such investigations.

12. The Ablaut in High German, by Dr. B. W. Wells, of the Friends' School, Providence, R. I.

The paper presented a history of the strong verbs from the Old High German to the present time. It was shown that the development in German was more regular than in any other Germanic dialect, and that a larger number of strong verbs was preserved here than elsewhere. Complete verb-lists were given, and a phonetic analysis of the ablaut vowels, the results of which are summarized in the following tables.

Class.	Total strong stems.	OHG strong.	MHG strong.	MHG additions.	MHG strong and weak.	MHG weak.	MHG absent.	NHG strong.	NHG additions.	NHG strong and weak.	NHG weak.	NHG absent.	Class.
I. a.	30	28	28	2	3	0	2	17	0	2	2	11	I. a.
I. b.	26	21	26	5	1	0	0	12	0	2	4	10	I. b.
I. c.	87	73	82	13	4	0	5	45	1	13	7	35	I. c.
II.	72	51	64	17	12	0	8	40	4	11	6	26	II.
III.	43	38	40	4	2	0	3	29	1	8	6	8	III.
IV.	27	25	22	1	3	2	3	14	1	4	4	9	IV.
V. a, b, d.	34	31	31	3	6	3	0	11	0	1	13	10	V. a, b, d.
V. c, e.	10	10	8	0	6	1	1	4	0	1	3	3	V. c, e.
Total,	339	277	301	45	37	6	22	172	7	42	45	112	Total.

The regular phonetic development of the ablaut is summarized in the following table.

	OHG.	MHG.	NHG.		OHG.	MHG.	NHG.
I. a. 1st	e (i)	e (i)	e (i)	III. 1st . . .	io (iu, ū)	ie (iu, ū)	ie (au, ū)
2d	a	a	a (o)	2d . . .	ou (ō)	ou (ō, o)	o
3d	ā	ā	x	3d . . .	u	u (o)	x
4th	e	e	e (o)	4th . . .	o	o	o
I. b. 1st	e	e	e (ä)	IV. 1st . . .	a	a (e)	a (e)
2d	a	a	a (o)	2d, 3d . .	uo	uo	u
3d	ā	ā	x	4th . . .	a	a (o)	a (o)
4th	o	o	o	V. a, a, b. 1st, 4th	a, ā, ei	a, ā, ei	a, ei
I. c. 1st	e (i)	e (i)	e (i)	2d, 3d	ia (ea, ē)	ie (iu)	ie (i)
2d	a	a (u)	a (u, o)	V. c, e. 1st, 4th	uo, ō, ou	uo, ō, ou	u, o, au
3d	u	u	x	2d, 3d	io (ia)	ie	ie
4th	o (u)	o (u)	o (u)				
II. 1st	i	i	ei				
2d	ei (ē)	ei (ē, i)	i (ie)				
3d	i	i	x				
4th	i	i	i (ie)				

The verbs which appear first in MHG. and NHG. were next examined. Some proved to be old strong verbs, others were shown to be new developments.

The examination of the OHG. strong verbs which showed regular or occasional weak forms in MHG. or NHG. followed. The causes were shown to be peculiarly in the form of the present and in the lack of supporting derivatives. The English was shown to have a far greater number of weakened verbs, both in ME. and in NE.

Lastly, the obsolete verbs were noticed. The causes of their disappearance were shown to be, either that they applied to circumstances no longer frequently

spoken of, or that the verbs lacked sustaining derivatives. The number was shown to be far less than in the English: 15 in MHG. and 67 in ME., and 112 in NHG. and 155 in NE., being the number of obsolete verbs.

13. Notes on the Anglo-Saxon Translation of St. Luke's Gospel, by Professor W. B. Owen, of Lafayette College, Easton, Pa.

This Gospel contains, like St. Matthew and St. Mark,[1] abundant illustration of the influence of the Latin syntax upon the forms in Anglo-Saxon. The translator, however, seems to hav workt with a sumwhat freer hand. The rendering is close and careful, but not uniformly so. At times it follows the original, with exact adaptation of word and fraze, even to the arangement; at other times, ther is a fredom which amounts to inatention to the meaning.

In the main items of imitativ syntax before noted, ther is, on the hole, litl difference. The paper gave a number of examples of the atempt to make an exact and faithful translation by following literaly the forms of expression in the original. The result ofn is peculiar turns of words and frazes, and sumtimes turns of meaning also, by the change of idiom.

Specimens of fre translation wer also givn.

With regard to variations from the original, they wer brought into thre or four classes.

First, ther ar aditions that ar merely explanatory of unfamiliar words, and that may hav cum in from marginal notes. They ar in conection with such words as *parasceue* (παρασκευή), *Calvarie*, *scorpionem*, etc.

Then ther ar obvius slips of the eye or pen, — as in xxii. 37, wher we hav *rihtwissum* for *unrihtwissum* : vi. 24, wher *witegum* stands insted of *weligum* ; xv. 12, *se yldra*, insted of *se gingra*, etc.

Among the variations that may properly be treated as peculiarities of the translation we find passages in which the meaning is slightly changed; as (to giv a single illustration), *redde rationem vilicationis tuae*, xvi. 2, — *agyf þine scire* ("giv up thy stewardship").

Other passages in which the original is weakend in the Anglo-Saxon; also passages in which it is strengthend. These points wer abundantly illustrated.

The paper also noted the frequent adition of frazes to make the text conform to similar passages elswher, in this or the other Gospels; also many aditions that did not hav this motiv, and many omissions. A number of passages wer cited as examples of loose and inaccurate rendering, wher the translator seems to hav caught the meaning imperfectly.

14. On the Substantive Verb in some North American Languages, by Albert S. Gatschet, of the United States Bureau of Ethnology, Smithsonian Institution, Washington, D. C.; read by the Secretary, Professor Lanman.

The lack of a true substantive verb *to be* in languages of a lower degree of evolution is an undisputed fact due to different causes. The function of this verb is of so abstract and purely formal a nature, that it may be almost considered as a grammatic form, that is, a purely relational part of the language.

[1] See *Transactions*, Vol. XIII. p. 59.

One cause for the non-existence of the substantive in many of the illiterate languages is the comparative scarcity of abstract terms and of pure grammatical or relational forms in general. Of all abstractions only those are expressed in words or by grammatic forms, by the ruder populations, which are to them of some deictic import. In languages which have reached the agglutinative stage and are highly synthetic, many ideas are expressed by grammatic forms which we render by separate words, as the definite and indefinite article, potentiality, iteration, beginning, continuation, termination, causation; and one of these forms, either prefixed or suffixed to the radix, is the equivalent of the verb *to be*.

That the idea of existence can be understood in various ways is proved by the fact, that Greek has several substitutes for *εἶναι*, as *ὑπάρχειν*, *πέλεσθαι*, etc.; and that the Aryan languages employ different radices in conjugating *to be*, as in *asmi*, *wēsan*, which originally had a more concrete signification. These substitutes plainly show, that *to be* can be taken in at least two acceptations, that of the real, essential existence, and that of the accidental, chanceful, non-essential existence; a distinction which is clearly expressed by the two verbs *to be* and *to exist*, and in Spanish by *ser* and *estar*.

Now the different ways of indicating either one of these two acceptations, or both, can be summed up as follows:

1. A personal pronoun connected with a noun (substantive, adjective) may be used in a predicative sense as a substitute for *to be*; "he enemy," for "he is an enemy."

2. An affix, which is generally a suffix of demonstrative import and origin, and invariable in its form, is connected with a noun and used predicatively for the same purpose. This is done in Cha'hta, for instance. Some languages will use one affix when the object spoken of is near or visible, and another when it is remote, invisible, or simply imaginary; still others, when it stands, sits, lies, or travels.

3. A demonstrative particle of the above description becomes *verbified*, and is then connected in a predicative sense with nouns, to serve as a substantive verb. This we find to be the case in the Klamath language of Southwestern Oregon; it shows an analytic tendency in the language.

4. Nouns become verbified by the appending of inflectional affixes, generally suffixes, and are inflected like verbs. When stems of a qualitative or adnominal signification are inflected in this manner, we call them attributive verbs, and the adjective itself is then usually the participle or a verbal adjective of them. When substantives become thus inflected, we may call them verbified substantives, as in Hitchiti: míki, "chief"; mikólis, "I am chief"; immikólis, "I am their chief."

It will be seen by the instances adduced below, that this fourth method is probably the most frequently used to express the substantive verb *to be* in the languages of North America. But it expresses the idea of the true substantive verb as well as it does that of accidental existence, and I doubt whether there is any language in America which makes any distinction between the two by means of separate grammatic forms.

5. A fifth mode of substitution lies in expressing the idea of existence simply by the position of the attribute or predicate *before* the noun to be qualified, or *after* it, and by distinguishing it through the rhetorical *accent*. Thus, when we say in Latin, *bonus vir*, "that 's a good man," we can dispense with the copula *est*, because we have placed the strongly accentuated attribute before the noun to be qualified.

EXAMPLES FROM VARIOUS LANGUAGES.

Káyowē.

kíamat, "lazy"; tsî' kíamat, "a lazy horse."
nû a kíamat, "I am lazy"; ba, ĕmba kíamat, "we, ye are lazy.
dén, "tongue"; ám dén, "your tongue."
ám dén tsé-omki, "your tongue is short."
ám dén kíyumki, "your tongue is long."

Witchita.

hushtákari, "a new house."
tirakā'sha hūshtákari, "this house is new."
hidí akáta kári-i, "an old house."
tirakā'sha hídi akáta kari-i, "this house is old."
tirakā'sha hídi akari-i, "this house was old."
tirakā'sha ga-aká ntsäríwa, "this house will be old."

ni-ikawa na-áshkits, "a blue shirt."
ni-ikawa na-ashkits tî', "the shirt is blue."

Páni.

rákis, "wood"; rakáshish, "hard wood."
tirahātse tihákasish, "this wood is hard."
tikī'skasish, "hard bone."
tirahā'tse tikī'shkasish, "this bone is hard."

Pima.

kĕ'ri, "old"; kĕ'ri tchiō'tch, "old man."
ániut kĕ'ri, "I am old"; ápĕput, áput kĕ'ri, "thou art old."
hĕ'kut kĕ'ri, "he, she is old."
ápi-amut kĕ'keri, "ye are old."
teni kĕ'ri kĕhém, "I was old."
vánto kĕ'rit, "I shall be old."

Yávipai.

gígye, "strong"; pá gigä'ya, "a strong man."
yä'ki pá gigä'gmi, "this man is strong."
pámĕ gigä'gmi, "he is a strong man."
nä'di, mi gigä'gmi, "I am, thou art strong."
áha dúye, "hot water."
(a)háde duígium, "the water is hot."
há χuánia, "clean water."
háve χuánigium, "the water is clean."
wí niměsáva, "white stone."
wí niměsávigum, "the stone is white."
wí niměsáva hamúgium? "is the stone white?"

Isleta Pueblo.

nū'eg, "night"; nū'eg nami-í, "a dark night."
nū'eg nanómim, "the night is dark."

na bā'd'hūi nátufu, "white paper."
nátufu bad'hū'm, "the paper is white."
nátufu funi-í, "black paper."
pám bad'hū'm, "the snow is white" (pám, "snow").

Uta.[1]

árik úmwi u? "which (is) your arrow?"
úngok úmwiung pí-eu? "who (is) your wife?"
árik núni pato? "where (are) my moccasins?"
ungai-erra ing púnk? "whose horse (is) this?"
ing núni púnk, "this (is) my horse."
agávunti nú-intsu érramun? "what people are you from?"
úng ure? "who is it?" ungámure? "who are they?"
ágarr pató-i? "which (is) the longest?"
intch pató-i, "this (is) the longest."
intch wēts kóagu, "this (is) the sharpest knife."

The Witchita and Páni dialects belong to a linguistic family which has an overwhelming tendency to incorporate two or more terms into one by apocope, syncope, aphaeresis, and other means; this also appears from the examples quoted. The verb *to be* is expressed, except in the past and future tenses, by the demonstrative pronoun tirakā'sha, tirahā'tse, used *predicatively*.

No visible sign of *to be* appears in the examples of Káyowē and Pima, while in Yávipai, a dialect of the Yuma stock, the suffix -gium or -igium, in Isleta -m, -ū'm, supplies the copula *is*, and the word standing at the head of the sentence is thereby marked as the subject. In the Uta examples no distinct sign of a predicative suffix, or of affix, appears in any of the terms, nor any other distinct term for *is*, *are*.

More indications are furnished by the dialects of Kalapúya, which in their verbal inflection seem to approach pretty closely some of the Algónkin languages of the East. The synthetic tendencies of this Oregonian language preponderate over its powers of analysis.

The Kalapúya language of the Willámet Valley, in Western Oregon, presents an undeveloped form of speech, which is extremely archaic in many respects, and deserves to be closely studied by scientists desirous of listening to the rudest attempts of linguistic evolution. I have had the advantage of becoming acquainted with one of its northern dialects once spoken on Wápatu Lake, near Gaston; it is called the Atfálati dialect, a name which was corrupted into Tuálati by the white population.

No substantive verb exists in this dialect, nor in the whole Kalapúya family. The idea of the copula is expressed either by prefixes, or by the position of the rhetoric accent or of the words in the sentence; but when the verb *to be* appears in the past or future tense, the tense is expressed by a separate term or prefix.

Substantive nouns have, when not connected with a possessive prefix, *my*, *his*, etc., usually the prefix a-, while adjectives, used attributively and predicatively, have wa-, him-, plur. wan-, ni-, prefixed to them (in the third persons). Adjectives can all be inflected as attributive verbs, and the majority of the substantives can also become verbified by means of personal prefixes:

[1] The Uta examples are taken from a linguistic collection made by Major J. W. Powell. All the other languages are illustrated by examples gathered by the author himself.

Ayankē'ld, "a person of the Ayankē'ld tribe."
tchumyankē'ld, "I am of the Ayankē'ld tribe."
máha hintchĕmyankē'ld, "thou art of the A. t."
kōk, kétok miyankē'ld, "he, she is of the A. t."
tchi mē'n gumyankē'ld, "I was of the A. t." (mē'n, "once").
máha mē'n hingumyankē'ld, "thou wert of the A. t."
tchi tibúntcha Ayankē'ld, "I shall be an Ayankē'ld."
máha tabúntcha Ayankē'ld, "thou shalt be an A."

The adjective piéyim, "fat," is verbified into an attributive verb, as follows:

tchi tchpiéyim, "I am fat."
máha hintchpiéyim, "thou art fat."
kōk himpiéyim, "he is fat."
sóto tchidĕpiéyishtu, "we are fat."
miti hintchipiéyishtu, "ye are fat."
kínnuk nipié-ishtu, "they are fat."

One of the past tenses runs as follows:

tchi kupiéyim mē'n, "I was fat once."
máha hinkupiéyim mē'n, "thou wast fat once."
sóto kudĕpieyishtui mē'n, "we were fat once," etc.

The verb *to be* is indicated by the position of the accent, or of the words, or by prefixes, in sentences like the following:

kúmtuk mámpka, "the water is cold" (mámpka, "water").
háshka mámpka kúmtuk, "this water is cold."
awíffie tchéχtem, "the night is dark" (awíffie, "night").
awíffie máwin, "the night is clear, bright."
awē' himkáski, "the child is bad."
káski *or* kimkáski awé, "the bad child."
méfan káski awé, "a very bad child."
wamóyim akíutan, "the horse is black," and "the black horse."
tchúli-im mámpku, "the water is lukewarm."
yó-iu asháblil, "the wheat is dry."
pé-iu asháblil, "the wheat is ripe."
gúsha ántmat kúmmo, "this chicken is white."
wámmo ántmat, "the white chicken."
nímmo ántmat, "white chickens."
gä'm nímmo, "two are white."
púkĕlfan nímmo, "every one is white."
tchí tánu tch' Atfálatin, "my country is at Atfálati."
Kĕná-i tchi tánkuit, "my name is Kĕnai."
atállim tcha yü'lbiu, "the deer is, *or* deer are, in the woods."

atómp mapítchu apólio tcha túmmai, "there are eggs in the hawk's nest." This example shows that the language substitutes such verbs as *to lie, to be within, to be underneath*, for the verb *to be*, wherever the sense permits it; for mapítchu means "they lie within," mapī'd, "he, it lies in, on, upon, *or* within."

Of all the languages treated in this article, the one most thoroughly studied by me is that of the Klamath Indians. It presents features differing largely from all the others, and I have reason to suppose that the Sahaptin tongues of the Columbia River will exhibit a similar linguistic plan when they shall have been studied more thoroughly.

Klamath of Oregon.

The Klamath language, spoken by the Klamath Lake and Modoc Indians in Southwestern Oregon, furnishes very instructive evidence concerning the Indian equivalents to our verb *to be*.

The substantive verb is rendered here by the verb gî, kî. This is the verbified radix gē, kē, which appears as a pronoun, "this one," "these ones," and as a modal and local adverb, "thus, so," and "here." But this verb gî is used in many other verbal significations besides that of *to be*; in fact, it unites the functions of an intransitive and substantive verb to those of a transitive verb, and is employed besides as an auxiliary verb, being the only verb of this kind in the Klamath language. Gî originally points, as its origin suggests, to some object close by, in close contiguity, and hence visible or tangible; from this was developed a reference to *casual* existence, *accidental* being, to a "*happening to be*." This verbified particle gî is inflected all through, like any other verb, though I have not met with any instance of a distributive form, of which the natives claim the existence: gitko, distr. giggátko, participle of the past. This ubiquitous term, the applications of which form an interesting study in themselves, is also subservient in forming some of the limited number of attributive verbs which the language possesses.

The different functions of gî I present in the order of their logical evolution, which is as follows:

1. *To be here, to be at this* or *that place, to be at such a time.* This is the gî corresponding to the Spanish *estar*, from the Latin *stare*, "to be standing," and points to accidental existence, or occurrence by chance, generally implying close proximity to the grammatic or logical subject of the sentence. We may render it by *to exist*, though it often corresponds to our *to stay, to remain*. Examples:

kaní gî, "he, she is outside, outdoors."
tídsh gî, "to feel well," ḳú-i gî, "to be unwell."
lápi gî, "there were two (of them)."
kúmmĕtat gíank, "staying in the rocks."

From this definition has been evolved the gî composing the attributive verbs:

lushlúshli, "warm, hot"; lushlúshgi, "to be warm, to feel hot."
p'laí, "up, above, on high"; p'laíki, "to be in the culmination point."
ḳá-i, "not, no"; ḳä'gi, "to disappear, to be absent."

2. *To become, to begin to be.* kú-i gî, "to become, grow worse"; ḳíllitk tsulä'ks gî-uapk, "the body will become vigorous."

3. *To be really, essentially, intrinsically; to exist by its own nature.* In this definition gî represents our substantive verb *to be* and the Spanish *ser*, and forms a contrast with definition No. 1. We find it in the following examples:

káni hût gî? "who is he? who is she?"
î a tála gî, "you are right"; î a ḳú-i gî, "you are wrong."

tchélash pálpali gî, "the stalk (of that plant) is white."
nútakam lúk ḳálḳali gî, "the seed of the nútak plant is round.

As an auxiliary verb, gî forms periphrastic conjugational forms with every verb's verbals and participles:

nánuktua nû papísh gî, "I am a devourer of all (kinds of food)."
p'laíkishtka gî shápash, "the sun was about to culminate."

4. *To be possessed by, to be the property of, to be endowed with.* When used in this sense, gî takes the owner or proprietor in its possessive case (*to be somebody's*), the pronoun possessive in its subjective case, and the object possessed in its subjective case also. The use of the participle gítko is especially frequent: *possessed of*, with objective case:

kánam kēk í-amnash gî? "whose are these beads?"
kánam gē látchash gî? "who owns this lodge?"
tunépni gé-u wélwash gî, "I have five water-springs."
kailálapsh gítko, "provided with, dressed in leggings."

5. *To do, to act, to perform.* Here and in No. 6 the verbified particle gî assumes the functions of a transitive verb:

tídsh gî, "to do right, to act well."
ḳú-i gî, "to act wickedly, to do evil, to be obnoxious."
wák î gén gîtk? "what are you doing here?"
húmasht gíulank, "after having acted thus."

In this signification gî appears also in a few *verba denominativa:*

nkák, "top of the head"; nkā'kgî, "to give birth."
nkásh, "belly, abdomen"; nkáshgi, "to have diarrhœa."

6. *To say, to speak.* Gî is used in this sense only when the words spoken are quoted either *verbatim* or in part; this definition has been evolved from No. 5, *to do*, and the French also sometimes say *il fit*, instead of *il dit*.

nû ná-asht gî, nā'sht ki, "so I said, so he said *or* says."
tsí sha hûn ki, "so they said."
nû gítki gî, "I say they must become."

MASKOKI FAMILY.

The languages of Maskoki affinity, formerly spoken in the Gulf States from the Mississippi to the Atlantic, have the power of expressing accidental and real existence by a verbification of the noun. In *Creek* all adjectives can be verbified in the simple, as well as in the iterative or reduplicated form; but Hitchiti and Cha'hta can verbify substantives also. Thus we have in Creek:

lásti, "black," redupl. lasláti, "black here and black there"; verbified, lánis, "he, she, it is black"; laslánis, "he, etc. is black in spots."
haúki, redupl. hauháki, "hollow"; haúkäs, "I am hollow"; haúkīs, redupl. hauhákīs, "it is hollow," and "they are hollow."

Hitchiti verbifies in the same manner, and an instance of a verbified substantive, míki, "chief," was presented above.

Cha'hta is able to verbify all nouns and pronouns, even particles, which end in a vowel, by appending 'h, a sound which never varies, to express tense, number, or other grammatic categories. When words end in consonants, they are verbified by advancing the accentuation upon the last syllable. Examples: ála, "child"; ála'h, "it is a child"; hátak, "man"; haták, "he, it is a man"; kállo, "strong"; kállo'h, "he is strong"; fe'hna, "very"; fe'hna'h, "it is very"; taktchi, "to tie"; taktchi'h, "he is tying"; tchúkash, "heart"; tchukásh, "it is the heart."

Another way exists in the Maskoki languages to express existence. It is done by verbs conjugated as regularly as gî is in Klamath, and extensively used as auxiliary verbs. But they do not signify *to be*, but *to be so*, *to be thus*, or sometimes *to be there*. Thus we have in Creek, ō'mis, mómis, "it is so, it is thus," and the same in Hitchiti; in all dialects, ō'mis can be contracted into ōs, ōsh, and appended to the sentence, even in Cha'hta and Koassáti.

The Association adjourned to 8.30 A. M.

At about eight o'clock, the members of the Association gathered at the residence of Mr. and Mrs. Hiram Hitchcock, meeting there the gentlemen of the Faculty of Dartmouth, with their ladies and friends, and spent the evening in agreeable social intercourse.

HANOVER, N. H., Thursday, July 10, 1884.

The Association was called to order at 9 A. M.

The minutes of Wednesday's sessions were read and approved.

15. Some Peculiarities of a Hebrew Manuscript of the Fourteenth Century of the Christian Era, by Cyrus Adler, of the Johns Hopkins University, Baltimore, Md.

Manuscript copies of the Hebrew Bible are comparatively rare, and, considering the antiquity of the books which compose it, extremely modern. The oldest MS. in the Erfurt library, and according to Lagarde the oldest extant copy of the Massora, has been assigned the date of 1100. The oldest Hebrew MS. Bible in the Bibliothèque Impériale is dated 1286. Moreover, many of the early MSS. and some of the early prints are without vowel points. The most complete copy of the Pentateuch and commentaries in the Bibliothèque Impériale is in this condition. No. 107 of the "Collectio Davidis," now a part of the Bodleian Library, is the oldest punctuated text in the collection. It is a copy of the Psalms, no older than the fourteenth, and possibly as late as the sixteenth century. This unfortunate state of affairs leaves us no facts on which to base a study of the history of the vowel points, and makes textual criticism a hazardous undertaking.

The MS. under discussion is at present the property of Mayer Sulzberger, Esq., of Philadelphia, and was purchased by him from the late Dr. Wickersham, who had himself bought it from Prof. Vincenzo Gustale (now living at Florence, Italy). It was sold as a MS. of the year 1300, and was pronounced from an examination of the handwriting (by Rabbi Iesi of Ferrara) to be of that date.

The MS. contains סליחות, or rather תחנונים, i. e. supplicatory prayers recited,

by Jews between New Year's and the day of Atonement. Its first part agrees exactly with Luzzatto's collection, except that where his edition reads, "Here the reader says any prayer which he pleases," our MS. has always inserted one, a confirmation of both the correctness of the editor and of the antiquity of the MS. The MS. 630 of Derenbourg's Catalogue contains six such poetical invocations. Our MS. possesses three such poems which can be recognized (two from their acrostics and the third from its having lived to our own time), and which may furnish some evidence in regard to its date. The first — the acrostic of which is דניאל — is a poem of no merit. It was probably written by an Italian of the twelfth century. The next is the famous ברכי נפשי of Bahya ibn Bakoda, who flourished about the year 1100. The third, and for us most important, connects itself in three ways with the name of Menahem Reqanati, viz. the acrostic, the subscription, and the superscription.

The MS. consists of 34 leaves of mingled parchment and vellum, and was written by a professional scribe. The leaf is 8⅞ inches long and 12⅞ inches broad, and from the aging of the edges, this would appear to have been the original size. The formation of the letters *aliph*, *pe*, *he*, and *gimel* is peculiar.

On the top of the first page there are two lines and a half written in a style of Hebrew known as cursive Italian. They are much blurred and obscured, and were not written by the person who wrote the MS. The inscription warrants us in believing that Isaac Reqanati (there named) either wrote the MS. himself or hired a scribe to do it for him. That Isaac Reqanati was a contemporary and immediate successor of Menahem we may infer from his having preserved the poem, for nothing short of filial affection could have induced him to that step. Menahem Reqanati died in 1290, and is known to the modern world as a great Kabalist. From these facts as well as from the inscription, from the poem of Bakoda and that of Daniel, joined with the tradition and the opinion of the expert referred to, it is safe to assume that the MS. before us is one of the latter part of the thirteenth, or the earlier part of the fourteenth century.

A special interest attaches to the MS. because it contains the text of thirteen Psalms, a comparison of which with the *textus receptus* shows some striking variations. An examination of the vowel points proved even more interesting. In the thirteen Psalms there were over five hundred variations; three hundred are taken up in a confusion of *qameç*, *pathah*, and *hatef-pathah* (all *ā*-sounds). The pre-tonic *qameç* is unknown; the article frequently does not take *qameç* before a guttural.

It may be suggested that all this results from pure ignorance, but the fact that the פ כ ד ג ב and ת without *dagesh* have the *raphe* mark is itself sufficient evidence that the MS. has been carefully written. Of course it would be ludicrous to suppose that one MS. could overthrow a well-established system, yet we seem to have an absolutely phonetic system of representation without a knowledge of some of the rules of Hebrew grammar, which at best seem arbitrary.

From a study of the consonantal characters and a comparison with a MS. of the twelfth century, it appears that the MS. style, at least, is made up of initials, medials, and terminals. The present square character corresponds to the initial, which, being the more beautiful, was adopted by printers.

The peculiarities of punctuation seem to show that Qamhi's grammatical system was not without opponents. One MS. is not enough to warrant any positive inferences, yet these facts are important enough to deserve the attention of editors of future critical editions.

16. Greek Ideas as to the Effect of Burial on the Future of the Soul, by Professor F. B. Tarbell, of Yale College, New Haven, Conn.

It was the object of this paper to consider with what degree of clearness and positiveness the ancient Greeks believed in the exclusion from Hades of the souls of the unburied dead. The usual modern authorities on classical antiquities speak of this belief as if it were an unqualified dogma, but a review of the original evidence bearing on the point showed that the doctrine was only fitfully, and for the most part dimly apprehended, while notions inconsistent with it had an equal, if not a stronger, hold on the Greek mind.

True, the idea that the soul continues in the neighborhood of an unburied corpse appears from time to time among the Greeks, as among many other peoples. And once at least in Greek literature (Hom. Ψ 71 ff.) we meet with the less natural fancy that such a soul wanders forlorn on the confines of the underworld, on the hither side of Acheron. But, on the other hand, the soul was habitually spoken of as descending to Hades at the moment of death; and this tendency to think of Hades as the natural habitat of the disembodied spirit was so strong that a Greek might actually picture a shade as fully admitted to Hades, but complaining that his body was still unburied. Of this the most striking instance is in Hom. ω 186 ff. The complete lack of clear, consistent opinions on the subject is well illustrated by the prologue of the *Hecuba* of Euripides, when, at the outset, the ghost of Polydoros announces himself as coming from Hades, and then, thirty lines later. as having just deserted his unburied body.

The belief in the exclusion of the unburied from Hades was too hazy and wavering to account for the extreme importance attached by the Greeks to funeral rites. Such an explanation finds no countenance in the copious passages of Greek literature bearing on the whole matter of burial. The truth probably is, that burial, originating, like lustration, as a sanitary measure, owed its subsequent importance chiefly to immemorial usage and the religious sanction, though it is not denied that the exclusion idea, in so far as it prevailed, would contribute something in the same direction.

Remarks were made on this paper by Professors D'Ooge, Tarbell, and Perrin.

17. The Influence of Written English and of the Linguistic Authorities upon Spoken English, by Professor F. A. March, of Lafayette College, Easton, Pa.

Students of language ar apt to feel powerless amid the changes of language. They know, indeed, that scientific terms ar freely formd by scientific men. They can hardly fail to notice that proper names ar changed by the schoolmaster and by their spelling. But the popular speech is generally thought to be following the laws without regard to grammar men, or lexicografers. An examination of Walker's Pronouncing Dictionary wil surprize many by the extent of the changes which it wil show that ar contrary to the law of least effort, and seem to hav been produced by the spelling and by the authority of the dictionary.

The following classes of sounds wer mentiond as having changed in England, and more in America: —

1. *a* preceded by guttural *g* or *c* softend by the intervention of *e*. "When the *a* is pronounced short, as in the first syllables of *candle*, *gander*, etc., the interposition of the *e* is very perceptible, and indeed unavoidable; for though we can pronounce *guard* and *cart* without interposing the *e*, it is impossible to pronounce *garrison* and *carriage* in the same manner."

2. *e* before *r* pronounced *a* in *clerk*, *sergeant*, *servant*, *merchant*, etc.

3. *e* pronounced *i* in *yes*, *pretty*, *engine*, etc.

4. *i* in the initial syllabl unaccented before a syllabl beginning with a consonant has the sound of *e* short; *didactic*, *digamma*, *dilate*, *fidelity*, etc.

5. Words ending in silent *e* after a short vowel: *crocodile*, *columbine*, *eglantine*, *metalline*, etc.

6. The unaccented vowels pronounced in England with the obscure sound ar now in large numbers distinguisht in America.

7. *s* pronounced as *z* between two sonants by Walker, now has its name sound; *disable*, *disdain*, *absolve*, *resignation*, *nasal*, etc.

8. *d* + *i* and *d* + *y*, sounded *j* by Walker, and *t* + *i*, *t* + *y*, sounded *ch*, ar now often *dy* and *ty*: *soldier*, *educate*, *nature*, etc.

A large number of anomalous words which Walker notes as having a deplorabl pronunciation hav become regular: *acceptable*, *alienate*, *annihilate*, *apostle*, *apothecary*, *apron*, *asparagus*, *authority*, *been*, *bellows*, *chorister*, *confessor*, *construe*, *cucumber*, *catch*, *caviare*, *chap*, *chart*, *china*, *dictionary*, *oat-meal*, *ostrich*, *schedule*, etc., etc.

This kind of change, in which the speling and a desire to improve in speaking hav proved stronger than the law of least effort, is more prevalent in our day than ever before, and in America more than in England. The reason is that traditional pronunciation has givn way to the dictionaries. Very few Americans now decide how to pronounce a word by recolecting how their grandmother pronounced it; they refer to Webster or Worcester.

The stronghold of fonetic coruption is among those who cannot spel; but here everybody reads and spels. The influence of authority has become very great. Opinions of experts are easily colected and concentrated and promulgated. The views of our linguistic scholars would exert an immense influence in favor of improvements in language if they only would take courage and express them, and act on them.

Remarks were made upon this paper by Professor Whitney and others.

18. On the "Teaching of the Twelve Apostles" (Διδαχὴ τῶν δώδεκα Ἀποστόλων), by Rev. Dr. C. K. Nelson, of Brookeville Academy, Maryland.

The proofs required for the authentication of any document must be both historical and internal. No amount of external evidence can establish a claim which is inconsistent with the age and concomitant circumstances of the document in question. On the other hand, no amount of internal evidence can establish a claim which has no historical standing-ground. But when a document is entirely wanting in both of these respects, it can only be relegated to the sphere of the apocryphal and spurious; and if itself claim to belong to an historically different period, then it must be pronounced a forgery. The claim for the genu-

ineness and authenticity of the document recently discovered and published by Philotheos Bryennios, Metropolitan of Nicomedia, must be submitted to both of these tests, and sentence must be pronounced upon it in accordance with its fulfilment of the required conditions. The claim is, that the document in question "belongs undoubtedly to the second century; probably as far back as 120 A. D., hardly later than 160 A. D."

I. As to the historical proofs. The first authority cited is Clement of Alexandria. This authority is much better known for piety than for critical acumen. His proneness to ingenious speculation is proverbial. But even Clement does not use the word Διδαχή, but Γραφή, — a fatal defect in historical proof. The second authority is Athanasius. He is unquestionably more reliable than Clement of Alexandria. But unfortunately this witness is removed some two centuries from the earliest time claimed for the origin of the document. Athanasius does speak of some (so-called, as Eusebius says) apostolical writing as Διδαχή. But there were so many documents in the fourth century claiming to be of apostolic origin, that we cannot attach much importance to this evidence. The third authority cited is Eusebius of Caesarea, also a fourth-century authority. If the document in question is the document referred to by Eusebius, then the authority, to say the least of it, is very questionable; for Eusebius speaks of it as "the so-called Teachings of the Apostles." To test the value of such historical evidence, what judicious Christian critic would accept the Gospel of St. John, for instance, on such weak historic proof?

II. Internal evidence. In a genuine apostolical document we should expect to find some similarity of thought and language to the writings which are generally accepted as apostolical. But the document in question differs so essentially in linguistic construction and vocabulary from the writings of the New Testament that it is impossible to assign it to the same origin. It is impossible to get a complete idea of the syntactic construction from extracts. I therefore refer to the document *passim* for proof. The vocabulary is marked by many peculiarities. There are twelve words not in general Greek use, and fourteen not found in the New Testament. There are three words which are found only in the Septuagint, and two found only in the Epistle of Barnabas and in Gregory Nazianzen respectively. But lateness of origin is much more fully attested by the character of the teaching. Whatever is not an imitation of the Sermon on the Mount, or of some doctrine of the New Testament already more clearly and strongly expressed, bears marks of lateness. We note a few particulars: — 1st. The distinction between different degrees of Christian perfection. 2d. Making the questioning of the authority of the prophetic teacher the unpardonable sin. 3d. Distinctions in kinds of water to be used in baptism. 4th. The introduction of the doxology in the Lord's Prayer. 5th. Calling the Holy Communion the Eucharist, instead of participation of the Lord's body. Of the three hundred lines of which the document consists I have noted rather more than ten per cent as bearing the most decided marks of lateness of origin. As a conclusion of the whole matter, I am perfectly satisfied that the document neither on linguistic nor on theological grounds can claim for itself an origin anywhere within the first four centuries of the Christian era. On linguistic grounds alone I should assign it a place much later in Christian history, but the document is so comparatively free from later doctrinal errors that its place probably rightfully belongs to the fifth or sixth century. All that has been said is entirely apart from the *a priori* improbability that any important

document of the first two centuries of the Christian era should have escaped notice in antiquarian researches. As a general rule, it is the worthless documents that are not brought to the light. If by this very imperfect paper I shall have called attention to a document which by the very pretentiousness of its appellation challenges critical attention, I shall have accomplished all that I could possibly have hoped for or desired.

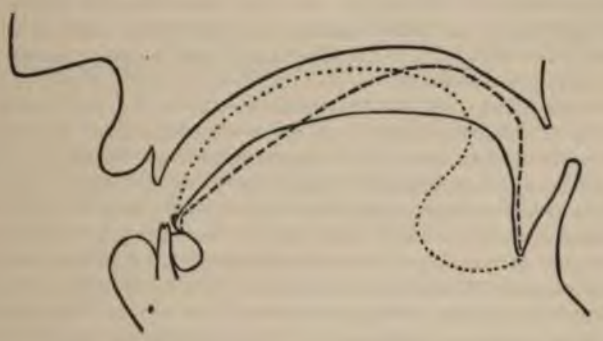
Professor D'Ooge made some remarks upon this paper.

19. Observations on Vowel-Utterance, by A. Schnyder; reported by Professor W. D. Whitney.

Professor Whitney began by pointing out the great difficulty of defining and classifying the vowel-sounds, and the obstinate differences of view still prevailing among phonetists with regard to even very fundamental points. The system now most in vogue is that of A. M. Bell, somewhat modified in detail by Sweet and others — a pigeon-hole system, finding place for a large variety of differences of sound by distinguishing extreme and medial positions of the back and front of the tongue and of both together ("mixed"), and by adding the modifications of "rounding," and of "wide" utterance as opposed to "primary": the main features of this system may be assumed to be known to all who concern themselves with phonetics. It is sought to be put in place of the older and long-current triangular or linear system, which recognizes *a* (*far*) as medial point, passing to *i* (*pique*) in one direction and to *u* (*rule*) in the other, through the intermediate steps of *e* (*they*) and *o* (*note*) respectively. Even Sievers, who in the first edition of his phonetical manual offers only the latter system, now in the second edition presents both, and gives (a little doubtfully, it is true, and with confession of uncertainty as to sundry points) the preference to the former or "English" system. The speaker said that he had never been able to regard the Bell system as anything at all approaching to a finality, or (however acute it might be in the notation of certain minor differences) as even containing so much and so valuable truth as the other one. It misdefines the *a*, buries the prominence and mutual relations of the five leading historical vowels under a heap of trivialities, and gives to the front of the tongue a primary importance in determining vowel-tone that seems by no means to belong to it. It had been with much satisfaction, then, that he had received from a correspondent in Chicago, Mr. A. Schnyder, some observations upon the subject which seemed to him so interesting and important that he desired (with the consent of their author) to bring them to the attention of the Association. Mr. Schnyder is a native of Switzerland, who, first in his own country and later in this, has been for more than forty years a teacher of articulation to the deaf and dumb, and has come, in connection with that teaching, to the views now held by him. They will be stated here substantially in his own words.

The characteristic distinction of all the simple vowels is conditioned by the position of the back or root of the tongue and of the pharynx, while the palatal cavity and the shape of the mouth add only trifling modifications. It is sufficient proof of this that any one may distinctly pronounce the vowel-series *u*, *o*, *a*, *e*, *i*, with the anterior organs of speech in very different positions: thus, for example, with the teeth tightly pressed together; with the lips nearly closed in a fixed position; with the tip of the tongue applied to either the lower or the upper

lip; with a ring held between the teeth and covered by the lips; with the tip of the tongue bent back upwards against the hard palate [and, it may be added, with the tongue in the position for uttering *l*]. Hence it follows, that Bell's description of the position of the tongue for his "mixed vowels" cannot possibly be correct. But the principal result of my investigations as to the formation of the vowels is the discovery that half the vowel-series is produced by depression of the root of the tongue. All previous descriptions, so far as known to me, make the vowel-sounds originate exclusively by raising the tongue, and hence are only in part correct. Starting from the position of indifference that makes the neutral vowel, the series toward *u* is made by raising the back part of the tongue, that toward *i* by depressing the root of the tongue. The accompanying figure will show the neutral position and those of *u* and *i* respectively; the positions of *e* and *o*, and of any other sounds intermediate between the neutral vowel and the extremes, would be traced between those here given.



The figure represents a perpendicular section of the mouth cavity, from the lips as far back as the veil of the palate and the epiglottis. The unbroken line shows the neutral position of the tongue; the broken line, the position for uttering *u*; the dotted line, that for *i*. It is assumed that the point of the tongue is held throughout against the lower teeth.

The depression of the "front" of the tongue in the *u*-position is simply the natural consequence of the humping of the back part of the tongue; and, in like manner, the lifting of the middle and front of the tongue in the *i*-position is only a necessary result of the retraction of the root of the same organ.

In passing from *u* to *i*, or the contrary, only the raising of the middle and front of the tongue is distinctly felt; but one may convince himself of the depression of the root of the tongue by passing the end of a finger in over the back of the tongue between the soft palate and the epiglottis. The resulting disposition to "gag" may be prevented at first by buttering the end of the finger; but after some practice the parts grow accustomed to be meddled with, and make no further resistance.

Professor Whitney said that he and others had fully convinced themselves, in the method last described, of the truth of Mr. Schnyder's account of the *i*-position,

and that it seemed to him a capital point in vowel-formation, and calculated to modify seriously the views hitherto entertained by phonetists.

Mr. Schnyder has founded an ingenious and practical system of vowel-notation upon his theory of vowel-formation, and regards it as not less comprehensive and more true to the facts than Bell's. It is to be hoped that he will soon take some opportunity to make a complete report of his observations and views.

20. A Word about the Sonant Fricative Consonants, by Professor Samuel Porter, of the National Deaf-Mute College, Washington, D. C.; read by Dr. E. D. Perry.

It has been common of late to describe the sonant fricatives, *v*, *th* in *thy*, *z*, etc., as made by means of breath added to tone. They are so described by Melville Bell, Henry Sweet, G. H. von Meyer, and others. Wm. A. Wheeler and Webster's Unabridged (ed. 1863) tell us they are like the corresponding non-sonant forms, only differing in that they have voice for breath. Both of these explanations are either erroneous or inadequate. Even if we soften down an *f* to a whispered *v*, and then add tone, we do not get a sonant *v*. Let two persons give simultaneously, one the breath-sound and the other bare tone from the vocal cords, the impression on the ear will not be that of *v*; and just so with *z* and the others. There is something more and other than breath-sound added to tone. The contrary explanation derives its deceptive plausibility from an experiment, in which you give first the breath sound, say for *f*, and then add, or seem to yourself to simply add, tone from the larynx. The result will, indeed, be a *v*. But what you do is not what you suppose you do, that is, not the mere adding of tone to breath-sound. Again when you describe the sonant as made by substitution of voice, or tone, for breath-sound, with the mouth organs in the same position, this is not all that you do. Still, this is correct so far as it goes; only that, in fact, breath-sound is not wholly eliminated. Voice is substituted for the greater part of the breath-sound. But this is not all that is done as respects the voice that is so substituted.

If we attend to our sensations as we utter, for instance, a *v*, we shall be distinctly aware of a vibration in the lip, or between lip and teeth. It is such as we do not feel in the case of an *f*. There is, I think, a tremolo effect, and there certainly is a tone in sympathetic response to the tone from the vocal cords and agreeing with that in pitch. There is also a damping of the tone by the interposed obstruction. And besides this, there is a muffled sound, as in the case of *b*, made by tone injected into a closed or partially closed cavity, with some distention of the elastic walls of the cavity. This kind of action is well understood in the case of the sonant mutes. The sound in that case, we know, comes to the outer air in part through the nasal passage, and a sonant mute, *b*, *d*, or *g*, cannot be perfectly uttered with this passage closed. The same is to be observed, though not in so high a degree, in the case of the sonant fricatives *v*, *th*, *z*, etc. We cannot pronounce them well when the nose is obstructed or closed.

We have thus noted three effects in these articulations as respects the tone; viz. a tremolo, a tone by responsive vibration, and also a muffling of the tone from the vocal cords.

But there is also, in a greater or less degree, in these consonants a sound of the

kind which we call breath-sound, and which has not its origin from the vocal cords, but is made by the action of the breath-current upon some part of the mouth organs. The same current that carries tone from the vocal cords may also act in this other way and give a breath-sound that attends on and blends with the tone. In the case of a *v*, this is very slight, and perhaps hardly perceptible, and is probably limited to the action of the breath between the teeth; — and so it is with the *th*. In a *v* made, in the German way (as the N. German *w*), by the lips alone, it may not exist at all. In the case of *z*, we have the sympathetic or responsive tone vibration made at a place on the tongue somewhat behind the tip, leaving the tip of the tongue nearly free for the hissing sound like that of *s*. The same, or still more, also in *zh*, heard in *azure*, as leaving the front of the tongue free for the *sh* sound.

It is to be added, that in the case of all the sonant fricatives, there may sometimes be a wavering, or unsteady utterance, giving a constantly varying, or oscillating, prominence to the breath-element on the one hand and the tone-element on the other.

21. Remarks on the Shapira Hebrew Roll, deposited in the Rush Library at Philadelphia, by Cyrus Adler.

Dr. Isaac H. Hall has, in a recent report to the American Oriental Society, called attention to a Shapira roll in the Philadelphia Library. It is a leather MS. of the Book of Numbers, and was thought to resemble a Karaite MS. A hasty examination aroused some suspicion, and accordingly a more careful investigation was made. Experts were called in and made some interesting comments. Through the "butcher cuts" on the back it was discovered that the leather had been colored, — rather inexplicable unless to give an appearance of age. The roll is made up of goat and calf hide (no sheep) indiscriminately put together (a combination prohibited by Biblical as well as by Rabbinical law, and therefore not used by Karaites). The appearance of age is given by a number of white stains resembling mildew, but for various reasons it cannot be a vegetable growth. It has attacked only the cuticle and has left the fibre untouched; it has not attacked the ink (naturally inclined to mould); and it has hardened the leather, — a result which could not possibly have been produced by the action of either mildew or water. Dr. Henry Leffmann, an experienced chemist, was inclined to think that corrosive sublimate had been used to give the mildewy appearance. Then again the leather shows in one place what shoemakers call "an invisible patch," quite a modern invention. And finally, the theory having been advanced that the roll was made up of pieces of different ages fitted together, on the oldest-looking piece in the middle of the roll and the newest-looking piece at the end there appears a peculiar formation of the letter *pe* to be found in all probability in no other MS., certainly not to be matched in this one. We are accordingly driven to the unhappy conclusion that this roll was manufactured to meet the wants of a curiosity-seeking age.

Professor March, as Chairman of the Committee on the Reform of English Spelling, presented his report.

The comittee hav taken no oficial action during the last year. Corespondence with the Comittee of the Philological Society of England has been had on

the preparation of an alfabetical list of all the words of which the rules adopted last year wil change the spelling, and perhaps a small dictionary following the improved spellings. There has been no very activ movement in regard to the reform. It has been proposed to start a periodical called *Language*, which shal use the spelling recomended by the Philological Associations.

On motion, the Report was aproved, and the comittee apointed in 1875 was continued for another year. It now consists of Messrs. March (chairman), W. F. Allen, Child, Lounsbury, Price, Trumbull, and Whitney.

Dr. E. D. Perry reported on behalf of the Auditing Committee that the account of the Treasurer had been examined and found correct. The report was accepted.

Professor Whitney, as Chairman of the Committee to recommend a suitable place and time for the next meeting, proposed that the Association should meet in New Haven, Conn., on the second Tuesday in July, 1885. The proposal of the Committee was accepted without dissent.

The report of the Committee to nominate officers for the ensuing year was presented by Professor Minton Warren, in the absence of Professors Seymour and White. The Committee made the following nominations: —

For *President*, — Professor William W. Goodwin, Harvard College, Cambridge, Mass.

For *Vice-Presidents*, — Professor Francis A. March, Lafayette College, Easton, Pa.; Professor William D. Whitney, Yale College, New Haven, Conn.

For *Secretary and Curator*, — Professor John Henry Wright, Dartmouth College, Hanover, N. H.

For *Treasurer*, — Professor Edward S. Sheldon, Harvard College, Cambridge, Mass.

For additional members of the *Executive Committee*, —

Professor Basil L. Gildersleeve, John Hopkins University, Baltimore, Md.
Professor Charles R. Lanman, Harvard College, Cambridge, Mass.
Professor Lewis R. Packard, Yale College, New Haven, Conn.
Professor Tracy Peck, Yale College, New Haven, Conn.
Professor Bernadotte Perrin, Adelbert College, Cleveland, Ohio.

The Committee gave notice of a proposition to amend the Constitution, so as to unite the officers of Secretary and Treasurer.

Professors March and Whitney refused to accept nomination as Vice-Presidents. Professor Whitney moved to amend the report of the Committee by inserting the names of Professor Tracy Peck, of

Yale College, and Professor A. C. Merriam, of Columbia College, in place of Professor March's and his own. As a further amendment, it was moved that the names of Professors March and Whitney be put back again on the list of "additional members of the Executive Committee," in place of Professors Peck and Packard.

On behalf of the Treasurer, Professor Sheldon, the Secretary, Professor Lanman, withdrew the name of Mr. Sheldon as candidate for the office of Treasurer. The Secretary explained, at the same time, that a considerable saving of trouble would be made if the duties of the Secretary and those of the Treasurer were performed by the same person. At present the receipts come in part to the Secretary and in part to the Treasurer, and this has sometimes occasioned mistakes and oversights annoying both to officers and to members. Further, according to rule, the disbursements should be made by the Treasurer alone; but small expenses are constantly incurred by the Secretary, and the responsibility and control of the large expenses falls wholly on the Secretary, who has the sole charge of the printing of the annual publications of the Association. By the election of the same person to both offices, no provision of the Constitution would be violated, and a great deal of correspondence, now necessary, would become unnecessary. The making out of bills and the addressing of envelopes, and similar work, might be done by an experienced man in the employ of the University Press in Cambridge; so that, on the whole, the labor of the Secretary would not be materially increased by the addition of the duties of Treasurer. The Secretary accordingly moved, as a further amendment, that the place left vacant by Professor Sheldon be taken by Professor Wright.

A vote being taken upon the amendments, the Association assented to them, and the report of the Committee as thus amended was thereupon accepted.

On motion, a resolution to the following effect was adopted: —

The American Philological Association desires to express its hearty thanks to the President and Trustees of Dartmouth College, for the use of their halls for the meetings of the Association; to Mr. and Mrs. Hiram Hitchcock, for their kind reception of the members at their residence; and to the Managers of the Passumpsic Railroad, for their liberality in providing a pleasant excursion to Lake Memphramagog.

The Association adjourned at noon.

On Friday, the 11th, a considerable number of the members of the Association and of the Faculty of Dartmouth College, with their friends, left Hanover, and, after a pleasant morning's ride, in part up the Connecticut Valley, reached Newport, Vermont, at noon. The afternoon was spent most agreeably on the steamer "Lady of the Lake," which took the party to Magog, in Canada, at the farther northern end of Lake Memphramagog. Newport was reached again in the evening, and here the company separated.

OFFICERS OF THE ASSOCIATION.

1884-85.

PRESIDENT.

WILLIAM W. GOODWIN.

VICE-PRESIDENTS.

A. C. MERRIAM.
TRACY PECK.

SECRETARY AND CURATOR.

JOHN H. WRIGHT.

TREASURER.

JOHN H. WRIGHT.

EXECUTIVE COMMITTEE.

The officers above named, and —

BASIL L. GILDERSLEEVE.
CHARLES R. LANMAN.
FRANCIS A. MARCH.
BERNADOTTE PERRIN.
WILLIAM D. WHITNEY.

MEMBERS OF THE AMERICAN PHILOLOGICAL ASSOCIATION.[1]

J. W. Abernethy, Adelphi Academy, Brooklyn, N. Y.
Cyrus Adler, 870 North Eighth St., Philadelphia, Pa.
Eben Alexander, East Tennessee University, Knoxville, Tenn.
Frederic D. Allen, Harvard University, Cambridge, Mass.
William F. Allen, University of Wisconsin, Madison, Wis.
Joseph Anderson, Waterbury, Conn.
Robert Anderson, Episcopal Academy, 1314 Locust St., Philadelphia, Pa.
N. L. Andrews, Madison University, Hamilton, N. Y.
Stephen P. Andrews, 201 East Thirty-fourth St., New York, N. Y.
Robert Arrowsmith, 236 Degraw St., Brooklyn, N. Y.
John Avery, Bowdoin College, Brunswick, Me.
Cecil F. P. Bancroft, Phillips Academy, Andover, Mass.
Grove E. Barber, State University, Lincoln, Nebraska.
E. H. Barlow, Tilden Seminary, West Lebanon, N.H.
George A. Bartlett, Harvard University, Cambridge, Mass.
Samuel C. Bartlett, Dartmouth College, Hanover, N. H.
Wm. M. Baskerville, Vanderbilt University, Nashville, Tenn.
Charles C. Bates, Plymouth, Mass.
C. T. Beatty, High School, East Saginaw, Mich.
I. T. Beckwith, Trinity College, Hartford, Conn.
George Bendelari, Yale College, New Haven, Conn.
Charles E. Bennett, 1134 L St., Lincoln, Neb.
T. S. Bettens, "The Kensington," cor. Fifty-seventh St. and Fourth Ave., New York, N. Y.
Louis Bevier, Rutgers College, New Brunswick, N. J.
James S. Blackwell, University of Missouri, Columbia, Mo.
Maurice Bloomfield, Johns Hopkins University, Baltimore, Md.
E. W. Blyden, Monrovia College, Liberia.
James R. Boise, Morgan Park, Chicago, Ill.

[1] This list has been corrected up to November 20, 1884. Names left blank are of members who either are in Europe, or whose addresses are not known to the Secretary.

Hjalmar H. Boyesen, Columbia College, New York, N. Y. ("The Hetherington," cor. Park Ave. and Sixty-third St.).
Charles E. Brandt, Farmington, Conn.
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Library of the University of Bonn.
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[Number of foreign Institutions, 35.]

[Total, (284 + 54 + 35 =) 373.]

CONSTITUTION

OF THE

AMERICAN PHILOLOGICAL ASSOCIATION.

ARTICLE I. — NAME AND OBJECT.

1. This Society shall be known as "The American Philological Association."

2. Its object shall be the advancement and diffusion of philological knowledge.

ARTICLE II. — OFFICERS.

1. The officers shall be a President, two Vice-Presidents, a Secretary and Curator, and a Treasurer.

2. There shall be an Executive Committee of ten, composed of the above officers and five other members of the Association.

3. All the above officers shall be elected at the last session of each annual meeting.

ARTICLE III. — MEETINGS.

1. There shall be an annual meeting of the Association in the city of New York, or at such other place as at a preceding annual meeting shall be determined upon.

2. At the annual meeting, the Executive Committee shall present an annual report of the progress of the Association.

3. The general arrangements of the proceedings of the annual meeting shall be directed by the Executive Committee.

4. Special meetings may be held at the call of the Executive Committee, when and where they may decide.

Article IV. — Members.

1. Any lover of philological studies may become a member of the Association by a vote of the Executive Committee and the payment of five dollars as initiation fee, which initiation fee shall be considered the first regular annual fee.

2. There shall be an annual fee of three dollars from each member, failure in payment of which for two years shall *ipso facto* cause the membership to cease.

3. Any person may become a life member of the Association by the payment of fifty dollars to its treasury, and by vote of the Executive Committee.

Article V. — Sundries.

1. All papers intended to be read before the Association must be submitted to the Executive Committee before reading, and their decision regarding such papers shall be final.

2. Publications of the Association, of whatever kind, shall be made only under the authorization of the Executive Committee.

Article VI. — Amendments.

Amendments to this Constitution may be made by a vote of two thirds of those present at any regular meeting subsequent to that in which they have been proposed.

PUBLICATIONS OF THE ASSOCIATION.

THE annually published "Proceedings" of the American Philological Association contain an account of the doings at the annual meeting, brief abstracts of the papers read, reports upon the progress of the Association, and lists of its officers and members.

The annually published "Transactions" give the full text of such articles as the Executive Committee decide to publish. The Proceedings are bound with them as an Appendix.

The following tables show the authors and contents of the first fifteen volumes of Transactions:

1869-1870. — Volume I.

Hadley, J.: On the nature and theory of the Greek accent.

Whitney, W. D.: On the nature and designation of the accent in Sanskrit.

Goodwin, W. W.: On the aorist subjunctive and future indicative with ὅπως and οὐ μή.

Trumbull, J. Hammond: On the best method of studying the North American languages.

Haldeman, S. S.: On the German vernacular of Pennsylvania.

Whitney, W. D.: On the present condition of the question as to the origin of language.

Lounsbury, T. R.: On certain forms of the English verb which were used in the sixteenth and seventeenth centuries.

Trumbull, J. Hammond: On some mistaken notions of Algonkin grammar, and on mistranslations of words from Eliot's Bible, etc.

VanName, A.: Contributions to Creole grammar.

Proceedings of the preliminary meeting (New York, 1868), of the first annual session (Poughkeepsie, 1869), and of the second annual session (Rochester, 1870).

1871. — Volume II.

Evans, E. W.: Studies in Cymric philology.

Allen, F. D.: On the so-called Attic second declension.

Whitney, W. D.: Strictures on the views of August Schleicher respecting the nature of language and kindred subjects.

Hadley, J.: On English vowel quantity in the thirteenth century and in the nineteenth.

March, F. A.: Anglo-Saxon and Early English pronunciation.

Bristed, C. A.: Some notes on Ellis's Early English Pronunciation.

Trumbull, J. Hammond: On Algonkin names for man.
Greenough, J. B.: On some forms of conditional sentences in Latin, Greek, and Sanskrit.

Proceedings of the third annual session, New Haven, 1871.

1872. — Volume III.

Evans, E. W.: Studies in Cymric philology.
Trumbull, J. Hammond: Words derived from Indian languages of North America.
Hadley, J.: On the Byzantine Greek pronunciation of the tenth century, as illustrated by a manuscript in the Bodleian Library.
Stevens, W. A.: On the substantive use of the Greek participle.
Bristed, C. A.: Erroneous and doubtful uses of the word *such*.
Hartt, C. F.: Notes on the Lingoa Geral, or Modern Tupí of the Amazonas.
Whitney, W. D.: On material and form in language.
March, F. A.: Is there an Anglo-Saxon language?
March, F. A.: On some irregular verbs in Anglo-Saxon.
Trumbull, J. Hammond: Notes on forty versions of the Lord's Prayer in Algonkin languages.

Proceedings of the fourth annual session, Providence, 1872.

1873. — Volume IV.

Allen, F. D.: The Epic forms of verbs in *δω*.
Evans, E. W.: Studies in Cymric philology.
Hadley, J.: On Koch's treatment of the Celtic element in English.
Haldeman, S. S.: On the pronunciation of Latin, as presented in several recent grammars.
Packard, L. R.: On some points in the life of Thucydides.
Goodwin, W. W.: On the classification of conditional sentences in Greek syntax.
March, F. A.: Recent discussions of Grimm's law.
Lull, E. P.: Vocabulary of the language of the Indians of San Blas and Caledonia Bay, Darien.

Proceedings of the fifth annual session, Easton, 1873.

1874. — Volume V.

Tyler, W. S.: On the prepositions in the Homeric poems.
Harkness, A.: On the formation of the tenses for completed action in the Latin finite verb.
Haldeman, S. S.: On an English vowel-mutation, present in *cag*, *keg*.
Packard, L. R.: On a passage in Homer's Odyssey (x. 81–86).
Trumbull, J. Hammond: On numerals in American Indian languages, and the Indian mode of counting.
Sewall, J. B.: On the distinction between the subjunctive and optative modes in Greek conditional sentences.

Morris, C. D.: On the age of Xenophon at the time of the Anabasis.
Whitney, W. D.: Φύσει or θέσει — natural or conventional?

Proceedings of the sixth annual session, Hartford, 1874.

1875. — Volume VI.

Harkness, A.: On the formation of the tenses for completed action in the Latin finite verb.
Haldeman, S. S.: On an English consonant-mutation, present in *proof, prove*.
Carter, F.: On Begemann's views as to the weak preterit of the Germanic verbs.
Morris, C. D.: On some forms of Greek conditional sentences.
Williams, A.: On verb-reduplication as a means of expressing completed action.
Sherman, L. A.: A grammatical analysis of the Old English poem "The Owl and the Nightingale."

Proceedings of the seventh annual session, Newport, 1875.

1876. — Volume VII.

Gildersleeve, B. L.: On εἰ with the future indicative and ἐάν with the subjunctive in the tragic poets.
Packard, L. R.: On Grote's theory of the structure of the Iliad.
Humphreys, M. W.: On negative commands in Greek.
Toy, C. H.: On Hebrew verb-etymology.
Whitney, W. D.: A botanico-philological problem.
Goodwin, W. W.: On *shall* and *should* in protasis, and their Greek equivalents.
Humphreys, M. W.: On certain influences of accent in Latin iambic trimeters.
Trumbull, J. Hammond: On the Algonkin verb.
Haldeman, S. S.: On a supposed mutation between *l* and *u*.

Proceedings of the eighth annual session, New York, 1876.

1877. — Volume VIII.

Packard, L. R.: Notes on certain passages in the Phaedo and the Gorgias of Plato.
Toy, C. H.: On the nominal basis of the Hebrew verb.
Allen, F. D.: On a certain apparently pleonastic use of ὡς.
Whitney, W. D.: On the relation of surd and sonant.
Holden, E. S.: On the vocabularies of children under two years of age.
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Stickney, A.: On the single case-form in Italian.
Carter, F.: On Willmann's theory of the authorship of the Nibelungenlied.
Sihler, E. G.: On Herodotus's and Aeschylus's accounts of the battle of Salamis.
Whitney, W. D.: On the principle of economy as a phonetic force.
Carter, F.: On the Kürenberg hypothesis.
March, F. A.: On dissimilated gemination.

Proceedings of the ninth annual session, Baltimore, 1877.

1878. — Volume IX.

Gildersleeve, B. L.: Contributions to the history of the articular infinitive.
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TRANSACTIONS

OF THE

AMERICAN PHILOLOGICAL ASSOCIATION,

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I. — *The Roots of the Sanskrit Language.*

By W. D. WHITNEY,

PROFESSOR IN YALE COLLEGE.

THE word *root* as used in this paper is taken in its ordinary and well-understood sense, the many questions and controversies that attach themselves to it being passed without notice. And the object of the paper is to set forth what, in this sense, the roots of Sanskrit really are: really, that is to say, as opposed especially to the fictitious and false roots with which they have been mixed up by the native grammarians of India. It is now pretty generally known that the list of roots of their language as given by those authorities is wholly untrustworthy, and cannot be used in etymologic investigations. In fact, considerably more than half of those they include in the list have no right to be there, presenting neither verb-forms nor derivatives throughout the whole long history of the language; a great many of them, too, are of such form and ascribed meaning as show their artificiality. How the grammarians came to set up such a list, and where they got their false roots from, it is no part of our present object to inquire; the matter is one of extreme obscurity, and concerns the student of the Hindu science of grammar, and him alone; the facts of the case are too patent to be misunderstood or questioned. If there were a limited and moderate number of roots unauthenticated by traceable use, and if they were all homogeneous with the au-

thenticated roots, and to some extent supported by kindred words discovered in the other languages of the family, we should, as a matter of course, regard them as at least for the most part genuine, and only by accident unquotable. But, as things are, such an assumption is simply and utterly impossible; the mass and the character of the fictitious is overwhelming; and any root or roots in it can be regarded as genuine only when there is convincing positive evidence to that effect. In other words, the fact that a root of a certain form is given by the Hindu grammarians is of no value whatever; unless some other testimony to its authenticity can be brought forward, it must be discarded by the etymologist as a figment.

But not the false roots of the grammarians alone are excluded from use in Indo-European etymology; not a few of the real ones are equally unfitted for its purposes — those, namely, the time or manner (or both) of whose appearance in the records of the language shows them to be more or less probably of secondary origin, or to have taken on the semblance of roots in the course of the separate history of development of the Sanskrit itself. A root, for example, which makes its first appearance in the later language, is, unless in exceptional cases, no proper subject of comparison outside of India.

As intimated above, these truths with regard to Sanskrit roots have for some time past been coming to be realized, both theoretically and practically. And students of the history of Indo-European language have in good part learned that there is a trustworthy authority to which they may go in order to know whether an alleged root is genuine or not — namely, the great Petersburg Lexicon of Böhtlingk and Roth. In that work are to be found the results of a sifting of the whole recorded language, ancient and modern, with quotations and references to show the range and frequency of use; by its testimony one can judge the character of anything that is claimed to be Sanskrit. So nearly everything — and especially, so nearly everything that is ancient — has been gathered into its pages, that it must be deemed little short of complete and final, so far as the question of roots is

concerned. But it is not accessible to all, nor conveniently so to any but a practised Sanskrit scholar; and even by the latter its evidence is often not to be brought to bear without much expenditure of time and labor upon a particular case. During some years past, I have been preparing, partly from the Lexicon and partly from my own collections, a conspectus of all the verbal forms and primary derivatives that cluster about the quotable roots of the language, each item with designation of its chronological period, and it is now (July, 1885) just leaving the press at Leipzig.[1] I have thought, then, that it would be a convenient and useful work to draw off from that volume a chronologically classified list of the quotable Sanskrit roots, with such brief statements regarding their use and the occurrence of their derivatives as should either satisfy the inquirer respecting them in any given case, or should prepare him to consult with more profit the fuller sources of information indicated above.

By way of introduction, it may be briefly pointed out here that the history of the Sanskrit language falls into two principal divisions, the earlier and the later. That the later period is mainly represented by the common or classical Sanskrit, the language of the great mass of the Sanskrit literature, having its usages defined and determined by the native science of grammar — while, however, the two great epics (Mahābhārata and Rāmāyaṇa) are in a measure free from the domination of the grammarians' rules. That the earlier period is represented by the Vedic literature, taking the term Vedic in its widest sense, and falls — roughly, and not without some overlapping and mixture — into the three subdivisions of Veda, Brāhmaṇa, and Sūtra, or metrical text, prose exposition, and ceremonial prescription.

The designation of historical periods, then, to be made in the following lists and statements, is fivefold, and will be made by means of the letters V. for Veda (including, as here used,

[1] The Roots, Verb-Forms, and Primary Derivatives of the Sanskrit Language: a Supplement to his Sanskrit Grammar, by W. D. Whitney. Leipzig, Breitkopf and Härtel; Boston, Ginn & Co. 8vo. Pp. xiv., 250. Also in a German translation, by H. Zimmer.

only the Rig-Veda, Sāma-Veda, and Atharva-Veda: RV., SV., AV.), B. for Brāhmaṇa, S. for Sūtra, E. for epos, and C. for common or classical Sanskrit.

The classification of the roots, and their order as classified, will be as follows (putting first all the roots that are found in the earliest or Vedic period of the language, since these are most likely to be of Indo-European value): —

A. Roots found to occur at all periods, Vedic to classical (or V. +): 420.
B. Roots found throughout the older language, or in Veda, Brāhmaṇa, and Sūtra (V. B. S.): 38.
C. Roots found only in Veda and Brāhmaṇa (V. B.): 58.
D. Roots found only in the Veda (V.): 62.
E. Roots found from the Brāhmaṇa onward (B. +): 59.
F. Roots found only in Brāhmaṇa and Sūtra (B. S.): 8.
G. Roots found only in the Brāhmaṇa (B.): 24.
H. Roots found from the Sūtra onward (S. +): 17.
I. Roots found only in the Sūtra (S.): 3.
J. Roots found only in the later language, epic and classical (E. +): 55.
K. Roots found only in the epics (E.): 4.
L. Roots found only in the classical language (C.): 72.
M. Roots inferred only from derivatives: 25.

In all, 845 roots, but including not a few that are palpably variants of other roots, or evidently of secondary origin — or, in the latest period, artificial: that is to say, taken and made use of because they are given in the grammarians' root-lists. The last class, M., might of course have been considerably increased; only the most conspicuous cases have been included in it.

LIST OF SANSKRIT ROOTS.

A. *Roots found in all Periods, Vedic to Classical.*

1 akṣ, attain.
Secondary, from 1 **aç**. Only sporadic cases.

ac, añc, bend.
Hardly used after B. except in caus. and derivatives. Query whether **-añc** (**pratyañc** etc.) is this root or a suffix.

aj, drive.
Hardly used after S. except in derivatives.

añj, anoint.
Rare in later lang., except pple, caus., and derivatives.

aṭ, wander.
Rare, pers. forms only in RV.; compare **aṭ**.

ad, eat.

an, breathe.
Rarer later; some deriv. common throughout.

arc, ṛc, praise.

arh, deserve, etc.
Grows more common later.

av, favor.
Much rarer later, as also deriv., unless **avi**.

1 aç, aṅç, attain.
Compare 2 **aç** and 1 **akṣ**; little used later.

2 aç, partake of.
Probably ultimately the same with 1 **aç**.

1 as, be.
Abundant throughout. Few derivatives.

2 as, throw.

ah, say.
Only in four persons of perfect indicative.

āp, obtain.

ās, sit.

1 i, go.

iṅg, stir.
In earlier lang. only caus. (denom.?). No deriv. before S.

idh, indh, kindle.

il, be quiet.
In earlier lang. (AV. to S.) only caus.; no derivatives.

1 iṣ, seek.
Probably the same with 2 **iṣ**.

2 iṣ, send.
Apparently 1 **iṣ** with caus. meaning.

īkṣ, view.
Very rare in earliest lang., but rapidly gaining in frequency.

īṅkh, swing.
Unusual at all periods.

īḍ, praise.
Rare in later language.

īr, set in motion.
Only caus., pple, and deriv. in later language.

īç, be master.

1 uks, sprinkle.
Few unquestionable derivatives.

uc, be pleased.
Only **ucita** and **okas** after B.

ud, und, wet.
Only pple and deriv. after S.

ubh, confine.
Only **umbhita** after S.

uṣ, burn.
Apparently a differentiated form of 1 **vas**, 'shine.'

1 ūh, remove.
Doubtless a differentiated form of **vah**, 'carry.'

2 ūh, consider.
Probably 'carry in mind,' and same with 1 **ūh** and **vah**.

ṛ, ṛch, go.

1 ṛj, ṛñj, arj, direct, stretch, attain.
Generally reckoned as two roots. The first two forms only in older language.

ṛd, ard, stir, dissolve.

ṛdh, thrive.
Compare **vṛdh** and **rādh**.

ej, ij, stir.
Of rare occurrence.

edh, thrive.
Compare **ṛdh**.

kam, love.
No simple present-system. Compare **kan, kā**.

kaṣ, scratch.
Not in RV.

kas, open.
Not in RV.

kāç, appear.

kup, be angry.
Rare till E.

kū, design.
Not RV., exc. derivatives.

kūj, hum.
Not RV.

kūḍ, **kūl**, burn.
A very few sporadic cases; caus. conjugation.

1 **kṛ**, **skṛ**, make, do.

2 **kṛ**, **kir**, scatter.
The forms with **s** rare and late.

1 **kṛt**, cut.

2 **kṛt**, spin.
Only caus. after S.

kṛç, be lean.
Only caus. and deriv. after B.

kṛṣ, drag, plough.
By some divided into two roots.

kḷp, shape, adapt.

krand, cry out.

kram, stride.

krī, buy.

krīḍ, play.

krudh, be angry.

kruç, cry out.

kṣan, wound.
No pres.-syst. in V.; no deriv. in earlier language.

kṣap, be abstinent.
Only an isolated case or two in earlier language; not in RV.

kṣam, endure.

kṣar, flow.

2 **kṣi**, destroy.

kṣip, throw.

kṣud, crush.
Pres.-syst. only in RV.

kṣudh, be hungry.

kṣubh, quake.
In RV., only derivatives.

khan, **khā**, dig.

khād, chew.

khid, tear.

khyā, see.
No pres.-syst. in earlier language.

gam, **gach**, go.

garh, chide.
Only an instance or two in earlier language.

1 **gā**, go.
Pres.-syst. found only in V. B.

2 **gā**, sing.

gāh, plunge.

gup, guard.

gur, greet.
Doubtless a secondary form of 1 **gṛ**.

guh, hide.

1 **gṛ**, sing.

2 **gṛ**, **gir**, **gil**, swallow.

3 **gṛ** (**jāgṛ**), wake.
Only in reduplicated and intensive forms.

gṛdh, be greedy.

grath, **granth**, tie.

grabh, **grah**, seize.

gras, devour.

glā, be weary.

ghas, eat.
After S., only desid. and derivatives.

ghuṣ, sound.

ghṛ, **ghar**, drip.
After B., only **ghṛta** and caus. and derivatives.

ghrā, smell.

cakṣ, see.

car, move.

cal, stir.
Secondary form of **car**. Not in RV., except redupl. derivatives.

1 **ci**, gather.

2 **ci**, note, observe.
Perhaps the same with the preceding.

cit, perceive, know.
In later lang., only pple, second. conj., and derivatives.

cud, impel.
After V., only caus. and derivatives.

ceṣṭ, stir.
Not in RV.

cyu, move, stir.

1 **chad**, cover.
Exc. **channa** and deriv., only causative.

chand, 2 **chad**, seem, please.

chā, cut up.
Rare; not in RV.

chid, cut off.

1 jakṣ, eat.
Reduplicated form of **ghas**.

jan, jā, give birth, be born.
The form **jā** only in pres.-syst., pple, and derivatives.

jambh, jabh, chew up, crush.

jas, be exhausted.
After V., only caus. and derivatives.

1 ji, conquer.

jīv, live.

juṣ, enjoy.

jū, be swift.
Probably related with **jīv**; only caus. in later language.

1 jṛ, waste away.

jṛmbh, gape.

jñā, know.

takṣ, fashion.

taḍ, beat.
In earlier lang., only deriv. (and **tāḍhi**?).

1 tan, stretch.

tap, heat.

tam, faint.
In V., only deriv. and one form (**tamat**).

tij, be sharp.
In later lang., only desid, caus., and derivatives.

tud, thrust.

tuṣ, be content.
Before S., only caus. (and **tūṣṇīm**?).

tṛ, pass, cross.

tṛd, bore, split.
After S., hardly exc. in derivatives.

tṛp, be pleased.

tṛṣ, thirst.
After B., only pple and derivatives.

tyaj, forsake.
Only one occurrence before S.

tras, be terrified.

trā, rescue.

tvar, hasten.
Not in RV.; related with **tṛ, tur**.

tviṣ, be stirred up.
Only in RV., exc. in derivatives (and a single verb-form in C.).

daṅç, daç, bite.

dam, control.

day, share.
Secondary form of **2 dā**.

das, dās, waste.
After S., only **dasta** and derivatives.

dah, burn.

1 dā, dad, give.

2 dā, divide, share.
In later lang., only pple and derivatives.

3 dā, bind.
After B., only pple and derivatives.

diç, point.

dih, smear.

dīkṣ, be consecrated.
Not in RV.; before B., only pple and deriv.; certainly secondary.

dīp, shine.
In RV., only causative.

1 dīv, play.
No connection with the so-called root **div**, 'shine.'

du, 1 dū, burn.
Not in RV.

duṣ, spoil.
In V., only caus. and derivatives.

duh, milk, derive.

1 dṛ, pierce, split.

dṛp, rave, talk big.

dṛç, see.
Lacks a pres.-system.

dṛh, dṛṅh, make firm.
In later lang., only pple, caus., and derivatives.

dyut, shine.

1 drā, run.
Only sporadic in later language.

2 drā, sleep.
Before B., only pple (not RV.) and derivative.

dru, run.

druh, be hostile.

dviṣ, hate.

dham, dhmā, blow.

1 dhā, dadh, put.

2 dhā, suck.
Related with **dhi**.

1 dhāv, run.
Compare **dhan, dhanv, dhav**.

2 dhāv, rinse.
Related with **dhū**, or else with **1 dhāv**.

dhī, dīdhī, think.
In later lang., only pple and derivatives.

dhū, dhu, shake.
Deriv. almost wanting in later lang. Compare 2 **dhāv.**

dhṛ, hold.
Simple pres.-syst. almost wanting.

dhṛṣ, dare.

dhvaṅs, dhvas, scatter.

dhvan, sound.
Divided by BR. into 1 **dhvan** and 2 **dhvan,** 'cover.'

dhvṛ, dhur, dhru, injure.
After B., only pple (**dhūrta**).

nad, sound.

nand, rejoice.
Doubtless the same with **nad.**

nam, bend, bow.

1 **naç,** be lost.

nah, tie.
Exhibits in some forms and deriv. the form **nadh.**

nāth, seek aid.
Has the form **nādh** in V. B.

nij, wash.

nind, nid, revile.

nī, lead.

1 **nu, nū,** praise.

nud, push.

nṛt, dance.

pac, cook.

1 **pat,** fly, fall.

pad, go.

1 **paç, spaç,** see.
spaç (exc. **spaṣṭa,** pple) only in older lang.; of **paç,** only a pres.-system.

1 **pā,** drink.

2 **pā,** protect.

pi, pī, swell, fatten.
After B., only pple and derivatives.

piç, adorn.
After B., only pple and derivatives.

piṣ, crush.

pīḍ, press.
No pres.-syst. except causative.

puṣ, thrive.

pū, cleanse.

1 **pṛ,** fill.

2 **pṛ,** pass.

pṛc, mix.
Mainly limited to the earlier language.

pyā, fill up.
A secondary form of **pi, pī.**

prach, praç, ask.

prath, spread.

prī, please.

plu, float.
Doubtless the same with **pru.**

phaṇ, spring.

baṅh, make firm.
Only pple, except caus. (in B.) and derivatives.

bandh, bind.

bādh, oppress.

budh, know, wake.

1 **bṛh,** make big or strong.

brū, say.
Only pres.-syst.; hardly any derivatives.

bhakṣ, partake of, eat.
Doubtless secondary, from **bhaj.**

bhaj, divide, share.

bhañj, break.

bharts, revile.
Not in RV.; sporadic, and doubtless secondary.

bhas, devour.
Compare **pas.**

bhā, shine.
Compare **bhan** and **bhās.**

bhās, shine.
Doubtless secondary, from **bhā.**

bhikṣ, beg.
Desid. formation, from **bhaj.**

bhid, split.

bhī, bhīṣ, fear.

1 **bhuj,** bend.

2 **bhuj,** enjoy.

bhū, become, be.

bhūṣ, attend upon, adorn.
Secondary, from **bhū.**

bhṛ, bear.

bhṛjj, roast.
No deriv. in V.

bhraṅç, bhraç, fall.

bhrāj, shine.

maṅh, mah, be great or liberal, bestow.

majj, sink.

math, manth, shake.

mad, mand, exhilarate.

man, think.

1 **mā,** measure.

2 **mā,** exchange.
Sporadic; doubtless a specialization of 1 **mā.**

1 mi, fix.
Doubtless a side-form of **1 mā**.

mith, alternate, altercate.
In later lang., only gerund and derivatives.

miṣ, wink.

mih, *mingere.*

2 mi, mī, damage.

mīl, wink.

muc, mokṣ, release.

mud, be merry.

muṣ, steal.

muh, be crazed.

mūrch, thicken.
Not in RV.

1 mṛ, die.

mṛkṣ, stroke.
Doubtless secondary, from **mṛj**.

mṛj, wipe.

mṛḍ, be gracious.

mṛd, rub, crush.

mṛç, touch, feel.

mṛṣ, not heed.

med, be fat.
After B., only caus. and derivatives.

mruc, mluc, mlup, go down, set.

mlā, relax.
In V., only pple and causative.

yaj, offer, sacrifice.

yakṣ, press on (?).
Only in RV., exc. (doubtful) deriv., and one verb-form in E.

yat, stretch.

yabh, *futuere.*

yam, yach, reach.

yas, yeṣ, be heated.

yā, go.
Doubtless a secondary form of **i**.

yāc, ask.

1 yu, unite.
In later lang., only verbals and derivatives.

yuj, join.

yudh, fight.

rakṣ, protect.

raj, rañj, color.

radh, randh, be *or* make subject.
After B., only caus. and derivatives.

rabh, 1 rambh (labh), take hold.

ram, be *or* make content.

1 rā, 2 rās, give.
Sporadic in later lang., exc. verbals and derivatives.

rāj, be kingly.
Probably secondary, from **ṛj**.

rādh, succeed.

ric, leave.

riph, snarl.
Not in RV.; rare.

ribh, sing.
Hardly in use after B., exc. in a deriv. or two.

riṣ, be hurt.

1 ru, cry.

ruc, shine.

ruj, break.

rud, weep.

2 rudh, obstruct.

ruṣ, be vexed.
Sporadic in older language.

ruh, ascend.

lap (rap), prate.

labh (rabh), take.

likh (rikh), scratch.
Not in RV.

lip, limp (rip), smear.

1 lī, cling.

lup (rup), break.
Not in RV.

lubh, be lustful.
Only caus. in RV.

vac, speak.

vañc, move crookedly.

vad, speak.

vadh, badh, slay.

van, 3 vā, win.
In later lang., only pple and derivatives.

vand, greet.
Doubtless the same with **vad**.

1 vap, strew.

vam, vomit.

valg, spring.
Not in RV., exc. **valgu**.

vaç, be eager.

1 vas, shine.
In later lang., only pple and derivatives. Compare **uṣ**.

2 vas, clothe.

3 vas, dwell.

vah, carry.
Compare **1** and **2 ūh**.

1 vā, blow.

2 vā, vi, 2 u, weave.
vāñch, desire.
In older lang., only a pres.-system.
vāç, bellow.
1 vic, sift.
vij, tremble.
1 vid, know.
2 vid, find.
Doubtless originally the same with **1 vid.**
1 vidh, worship.
Hardly occurs in later language.
vip, vep, tremble.
viç, enter.
viṣ, be active.
viṣṭ, veṣṭ, wrap.
In RV., only pple.
1 vṛ, cover.
2 vṛ, choose.
Probably ultimately the same with **1 vṛ.**
vṛj, twist.
vṛt, turn.
vṛdh, grow.
vṛṣ, rain.
vṛh, 2 bṛh, tear.
vyath, waver.
vyadh, 2 vidh, pierce.
vyā, 2 vī, envelop.
vraj, proceed.
vraçc, cut up.
çaṅs, praise.
çak, be able.
çat, cut in pieces.
Not in RV.; only caus. in older lang.; called by grammarians the caus. of **2 çad.**
çap, curse.
2 çam, be quiet.
ças, 2 çās, cut.
çā, çi, sharpen.
1 çās, 2 çiṣ, order.
çiñj, twang.
Probably imitative; quite rare.
1 çiṣ, leave.
2 çī, lie down.
çuc, gleam.
çudh, çundh, purify.
çubh, çumbh, beautify.
1 çuṣ, dry.
çū, çvā, çvi, swell.
After B., only pple and derivatives.
1 çṛ, crush.
çṛdh, be defiant.
Sporadic in later language.
çcut, drip.
çyā, 3 çī, coagulate.
çrath (çlath), slacken.
çram, be weary.
çrā, 2 çṛī, 2 çṛ, boil.
In later lang., only caus. and pple.
çri, 3 çṛ, resort.
çru, hear.
çliṣ, çriṣ, clasp.
çvas, 2 çuṣ, blow, breathe.
ṣṭhīv, spew.
Not in RV.
saj, sañj, hang on.
sad, sit.
sas, sleep.
Hardly found after B.
sah, prevail.
1 sā, 1 si, bind.
sādh, sadh, succeed.
Only second. verb-forms in later language.
sic, pour out.
1 sidh, repel.
2 sidh, succeed.
Apparently related with **sādh.**
sīv, syū, sew.
1 su, press out.
Related with **sū.**
sū, 2 su, generate, enliven, impel.
Compare **1 su.**
sūd, put in order.
After V., only caus. and derivatives.
sṛ, flow.
sṛj, send forth.
sṛp, creep.
sev, attend upon.
skand, leap.
skambh, skabh, prop.
Compare **stambh.**
stan, thunder.
stambh, stabh, prop.
Seems another form of **skambh.**
1 stu, praise.
stubh, praise.
In later lang., only caus. and derivatives.
stṛ, strew.
sthā, stand.

snā, bathe.
snih, be sticky.
In earlier lang., only caus. and derivatives.
spand, quiver.
spṛdh, **spūrdh**, contend.
spṛç, touch.
spṛh, be eager.
sphūrj, rumble.
sphṛ, **sphar**, **sphur**, **sphul**, jerk, etc.
smi, smile.
smṛ, remember.
syand, **syad**, move on.
sraṅs, **sras**, fall.
sru, flow.
svaj, **svañj**, embrace.
svad, **svād**, sweeten.
svan, sound.
svap, sleep.
svar, sound.
In later lang., only caus. and derivatives.
svid, sweat.
han, smite.
1, 2 **hā**, go forth, leave.
hi, impel.
Probably related with **hā**.
hiṅs, injure.
Perhaps abbreviated desid. of **han**.
hīḍ, **hel**, be hostile.
In later lang., only **helamāna** and derivatives.
hu, sacrifice.
hū, **hvā**, call.
1 **hṛ**, take.
hṛṣ, be excited.
heṣ, whinny.
hnu, hide.
hrī, be ashamed.
hvṛ, **hur**, **hru**, be *or* make crooked.

B. *Roots found throughout the older Language, or in Veda, Brāhmaṇa, and Sūtra.*

2 **akṣ**, mutilate.
Only with prefix **nis**, 'out.'
ubj, force.
Deriv., B. +
ṛṣ, rush, push.
Generally divided into two roots. Deriv., V. +
kan, **kā**, be pleased, enjoy.
Deriv., V. +
kṣā, burn.
Perhaps secondary, from **ghas**; deriv., V. +
kṣṇu, whet.
khud, *futuere.*
grabh, seize.
The earlier form of **grah**; **garbha**, V. +
cṛt, bind.
One deriv., V. +
2 **ji**, **jinv**, quicken.
jyā, **jī**, overpower, injure.
Doubtless related with 1 **ji**.
tsar, approach stealthily.
Deriv., V. +
2 **dī**, **dīdī**, shine.
dīdhiti is found S. +
nabh, burst.
Deriv. (doubtful), V. +
2 **nu**, move.
pinv, fatten.
Secondary, from **pi**, **pī**.
pru, flow.
Older form of **plu**; one deriv. (?), V. +
pruth, snort.
Deriv., V. +
miç, **mikṣ**, mix.
Deriv., V. +
mīv, **mū**, push.
One deriv. (?), C.
mṛc, injure.
mṛdh, neglect.
One deriv., V. +
2 **yu**, **yuch**, separate.
Perhaps ultimately the same with 1 **yu**.
yup, obstruct.
Deriv., V. +
raṅh, hasten.
Deriv., V. +
ri, **rī**, flow.
Deriv., V. +
rih, lick.
Older form of **lih**.
vaj, be strong.
Denom.-caus.; deriv., V. +

2 vap, shear.
Doubtless the same with **1 vap**; deriv., V. +

vīḍ, make strong.
Only caus., and one derivative.

vlī, blī, crush.
In RV., only one (doubtful) derivative.

2 çad, fall.
Not in RV.; deriv., V. +

1 çam, çim, labor.

1 çī, fall.
Perhaps related with **2 çī**.

sagh, be equal to.
Probably another form of **sah**.

san, 2 sā, gain.
Deriv., V. +

spṛ, win.

C. *Roots found only in Veda and Brāhmaṇa.*

am, injure.
Deriv., V. +

2 i, inv, in, send.
Deriv., V. +. Doubtless identical with **1 i**.

īṇ, eṇ, move.
One deriv., C.

ṛt, art, pursue.
Mutilated form of **vṛt**; sporadic.

kṛp, lament.
Deriv., V. +

kṣad, divide.

1 kṣi, possess.
Deriv., V. +

gu, sound.
Only intensive.

cat, hide (?).

cāy, note, observe.
Secondary form of **2 ci**. Deriv., V. +

2 jakṣ, laugh.
Reduplicated form of **has**; sporadic.

taṅs, tas, shake.
Deriv., V. +

turv, tūrv, overcome.
Specialized form of **tṛ**.

tṛh, crush.

dakṣ, be able.
Deriv., V. +

dagh, reach to.
One deriv., V. +

dabh, dambh, harm.
Deriv., V. +

dāç, make offering.
One deriv., V. +

1 dī, fly.
Earlier form of **ḍī**.

drū, hurl (?).
Only two occurrences.

dhanv, run.
Doubtless secondary, from **dhan**.

dhūrv, injure.
Secondary form of **dhvṛ**; no derivatives.

dhraj, dhrāj, sweep, float.

nakṣ, attain.
Secondary form of **2 naç**.

2 naç, naṅç, attain.
One deriv. also in S.

nādh, seek aid.
Same as **nāth**.

2 pat, rule.
Doubtless denom. of **pati**.

pan, admire.

pibd, be firm (?).
Only an occurrence or two.

pīy, abuse.

prā, fill.
Secondary, from **1 pṛ**; one deriv. also in S.

pruṣ, sprinkle.
One deriv., V. +

psā, devour.
Doubtless secondary, from **bhas**; one deriv., C.

bhām, be angry.
Doubtless really denominative.

bhreṣ, totter.
Doubtless related with **bhraṅç**. One deriv., B. +

3 mā, bellow.
Probably imitative. Deriv., V. +

2 mṛ, mṛṇ, crush.
Doubtless the same with **1 mṛ**.

raṇv, delight.
Doubtless secondary, from **1 ran**.

rad, dig.
Deriv., also C.

1 ran, take pleasure.
One deriv., V. +

rap, chatter.
Older form of **lap**.

2 rā, bark.

riç, tear.
Older form of **liç**.

2 **ru**, break.
Sporadic and doubtful.

rup, break, pain.
Probably the same with **lup**.

rej, tremble.

1 **vī**, enjoy, etc.
Perplexing variety of meanings; by some divided into two or three roots. Deriv., V. +

ven, long.

vyac, 2 **vic**, extend.
One deriv., also S.

1 **çrī**, 4 **çṛ**, mix.
Deriv., V. +

çvañc, spread.
In one text, **çmañc**.

sac, accompany.
Deriv., V. +

sap, serve.
Deriv. (?), V. +

sarj, creak.

sku, tear.
One deriv., S.

srīv, fail.
Sometimes written **çrīv**.

1 **har**, be gratified.

2 **hṛ**, be angry.

D. *Roots found only in the Veda.*

ār, praise (?).
RV. only; very doubtful.

1 **u**, proclaim.
RV. only; more than doubtful.

3 **kṛ**, commemorate.
One deriv. (**kīrti**), V. +

kraks, crash.
Apparently imitative.

gadh, attach (?).
Only pple and one deriv., in RV.; doubtful.

gūrdh, exalt (?).
Once, caus., in RV.; doubtful.

can, be pleased.
RV. only; deriv., also V. +; compare **kan**.

jajh.
One form, RV.; wholly doubtful.

jañj.
Like **jajh**.

jūrv, consume.
Doubtless secondary, from 1 **jṛ**.

2 **jṛ**, sing.
Secondary form of 1 **gṛ**.

jeh, loll, pant.
Of doubtful character.

jri, go.
Only RV.

tak, rush.
Probably the same with **tac**; one deriv., C.

2 **tan**, roar.
Apparently abbreviated from **stan**.

tand, be weary.
Only RV., once; deriv., V. +

tāv.
In AV., once; probably a false reading.

tu, be strong.
Only RV.; deriv., V. +

tuj, urge, thrust.
One deriv. (?) in later language.

tuç, drip.
Divided by BR. into two roots.

tvaks, fashion.
Only RV., once; deriv., V. +

dañs, be wondrous.
Only RV., once; deriv., V. +

dan, straighten (?).
Only RV.; very doubtful forms.

dudh, stir up.
Probably redupl. form of **dhū**; one deriv. (?), C.

dhan, run.
Only RV.

dhav, flow.
Only RV.

nas, unite.
Only RV.

niñs, kiss.
Only RV.; one deriv., C.

nikṣ, pierce.
Deriv., V. +

paj, start (?).
Deriv. (?), V. B. S.

phar, scatter (?).
Only RV.; one deriv., V. B.

bhan, speak.
Only RV. Probably related with **bhā**; compare **bhaṇ**.

bhand, be bright.
Only RV.; deriv., V. +

bharv, devour.
Only RV.

bhiṣaj, heal.
Only RV.; deriv., V. +

bhur, quiver.
Probably specialized form of **bhṛ**.

bhuraj.
Only RV., once; belongs to **bhṛjj**?

bhyas, fear.
Secondary, from **bhī**.

bhrī, consume.
Only RV., once.

myakṣ, be situated (?).
Only RV.; probably the same with **mikṣ**.

yād, unite (?).
Only RV.; one deriv., B. +

rapç, be full.
One deriv., also B.

ramb, hang down.
Older form of **lamb**; one deriv., B.

rikh, scratch.
Another form of **likh**; only RV., once, and **lekhā**.

rip, smear.
Another form of **lip**; only RV.; and one deriv., V. +

1 **rudh**, grow.
Apparently a side-form to **ruh**.

vakṣ, 2 **ukṣ**, increase.
One deriv. (?), V. +

vat, apprehend.
Only with prefix **api**.

vindh, lack.
Only RV.; deriv. (?), V. +

vrad, **vrand**, weaken.
Only RV.

vrādh, stir up.
Only RV.

vlag, **vlañg**, pursue (?).
Only RV., with prefix **abhi**; related with **valg**?

1 **çad**, prevail.
One deriv. (?), V. +

çuj, swell (?).
Only RV., one form.

çcand, **cand**, shine.
Only RV.; deriv., V. +

çnath, pierce.
Only RV.

çruṣ, hear.
Secondary, from **çru**; deriv., V. B.

çvit, be bright.
Only RV.; deriv., V. +

sridh, blunder (?).
Verb-forms, only in RV.

hās, go emulously.
Secondary, from **hā**.

E. *Roots found from the Brāhmaṇa onward.*

īrṣy, be jealous.
Secondary, prob. from denom. **irasy**; deriv., AV. +

īh, be eager.
Deriv., V. +

kamp, tremble.
Deriv. (?), V. +

kal, drive, produce, etc.
Only caus. and deriv. Divided by BR. into two roots.

kāṅkṣ, desire.
Deriv., only in later language.

kuṣ, tear.
The single occurrence in B. doubtful.

knū, wet.
Sporadic.

kliç, distress.
Only a case or two before later language.

kvath, boil.
Deriv., only in later language.

kṣal, wash.
Doubtless the same with **kṣar**.

kṣu, sneeze.
Doubtless imitative. One deriv. in AV.

gal, drop.
Only one doubtful form in older language.

cam, sip.
Deriv. (?), V. +

cint, think.
Doubtless secondary, from **cit**.

chṛd, spew, eject.

jap, whisper.

jalp, murmur, speak.
One deriv., also V.

jyut, shine.
Another form of **dyut**; only one doubtful occurrence in later language.

jvar, be hot.
Compare **jval**, **jṛ**. Deriv., V. +

jval, burn, flame.
Another form of **jvar**.

4 dā, clarify.
Probably specialization of **2 dā**.

2 dīv, dev, lament.
Only pple till later language.

2 dṛ, heed.
Deriv., V. +

dṛbh, bunch.
No verb-forms in later lang.; deriv., V. +

dhi, dhinv, nourish.
Perh. a form of **2 dhā**; no deriv.

dhyā, think.
Secondary, from **dhī**; deriv., V. +

nard, bellow.

paṭ, tear, burst.

paṭh, read.
Hardly occurs till later language.

paṇ, bargain.
Deriv., V. +

bhaṇ, speak.
Only once before C.

bhal, perceive.
Only caus., B. and C.

bhāṣ, speak.
Related with **bhā, bhās, bhan**.

bhram, wander.
Only once in B.; deriv., V. +

mil, combine.
Only once in earlier language.

mreḍ, gratify (?).
Only an occurrence or two in earlier language.

mlech, speak barbarously.

ras, roar.

lakṣ, mark.
Really denom. of **lakṣa**, which (with other deriv.) V. +

lag, attach.
Only **lagna** (?) and **liṅga** (?) in earlier language.

lajj, be ashamed.
Only once in older language.

lamb, hang down.
Another form of **ramb**.

lih, lick.
Compare the other root-form, **rih**.

lū, cut.

lok, look.
Only once (and one deriv.) in older language.

valh, challenge.
Only pple in later language.

çañk, doubt.

çlāgh, extol.
Only once in older lang., exc. a deriv. or two.

skhal, stumble.
Only once, and one deriv., in older language.

styā, stī, stiffen.
Only B. and C.; deriv. (?), V. +

snu, distil.
One deriv. (?) in RV.

sphal, strike.
Hardly occurs in older language.

sphā, fatten.
Deriv., V. +

sphuṭ, burst open.
Deriv., only in later language.

has, laugh.
Deriv., V. +

hrād, make a noise.

hlād, refresh.
Only once in older language; deriv., V. +

hval, go wrong.
Another form of **hvṛ**.

F. *Roots found only in Brāhmaṇa and Sūtra.*

taṅc, tac, coagulate.
Same with **tak**? One (doubtful) deriv. in AV.

path, go (?).
No real root; denom. or error.

pūy, stink.
Deriv., AV. +

mrit, mlit, dissolve.
Sporadic.

reḍ, deceive (?).
Only in a single phrase.

liç, tear.
Another form of **riç**; deriv., V. +

2 lī, be unsteady.
Only in intensive forms.

sūrkṣ, heed.

G. *Roots found only in the Brāhmaṇa.*

krath, be jubilant.
Only once; doubtful deriv., E. +

krūḍ, thicken (?).
Only in a single passage.

klath, turn (?).
Only one occurrence.

kṣviḍ, hum.
Perhaps imitative. Compare **kṣviḍ**.

khad, be hard.
Only once; doubtful deriv., V. +

gard, exult (?).
Probably same as **gūrd**.

gūrd, exult (?).
In only one passage; one deriv., B. +

taṭ, clatter.
Only once; apparently imitative.

tāy, stretch.
A questionable side-form to **tan**.

til.
A single very doubtful occurrence.

thūrv.
A single very doubtful occurrence.

dram, run.
Only a case or two; apparently side-form to **drā**.

ned, flow.

pāy, *cacare*.
One doubtful occurrence; one deriv., B. +

pis, stretch (?).
In a single passage.

plī.
A single doubtful occurrence.

1 **bal**, whirl (?).
A single intensive form.

manṭ.
A single questionable occurrence.

mṛch, perish.
In only a single passage.

çlā, dissolve (?).
One occurrence; prob. another form of **çrā**.

subh, **sumbh**, smother (?).
One doubtful deriv., V.

sul.
A single very doubtful occurrence.

stigh, mount.
Found in one text only.

hūrch, fall away.
Probably related with **hvṛ**.

H. *Roots found from the Sūtra onward.*

uñch, glean.

kuc, **kuñc**, shrink, curl.
Only once in S.

klid, be wet.
Deriv., also AV.

gad, say.
Deriv., B. +

guṇṭh, cover up.
Only gerund in S.

ghṛṣ, rub.
Only gerund in S.; doubtful deriv., V. +

carv, chew.
Only pple (**cūrṇa**) before C.

cyut, drip.
A blundering variant of **çcut**.

pūj, reverence.
One deriv., also RV.

mnā, note.
Secondary, from **man**.

rah, desert.
Deriv., V. +

lañgh, leap.
Only pple (and one deriv.) in S.

luḍ, stir up.
Only verbals in S.

3 **çam**, note.
Doubtless a specialization of 2 **çam**.

çran, give.
Only with prefix **vi**.

çrambh, trust.
One deriv., RV.

hras, shorten.
Deriv., B. +

I. *Roots found only in the Sūtra.*

kharj, creak.
Deriv., V. +

gulph, bunch.
Doubtful; one deriv., AV. +

stṛh, crush.
Only one occurrence; seems a variant of **tṛh**.

J. *Roots found only in the later Language (Epic and Classical).*

aṭ, wander.
Later form of **at**.

ujh, forsake.
Secondary, from **hā** + **ud**; deriv., B. +

katth, boast.
Seems a prakritized root-form.

kuṭṭ, divide, crush.
Probably prakritized form of 1 **kṛt**.

kūrd, leap, exult.
Doubtless the same with **gūrd**; one deriv., S.

klam, be weary.
Compare **çram**.

kṣviḍ, hum.
Later form of **kṣvid**.

kṣvel, play.

khac, show through.

khel, stagger.
One deriv., V. +

garj, roar.

ghaṭ, strive.
Apparent deriv., V. +

ghaṭṭ, rub, etc.
A prakritized root-form.

ghuṭ, turn (?).
Only verbals, and one deriv., S.

ghūrṇ, waver.
One apparent deriv., S. +

cakās, **cakāç**, shine.
Perhaps from **kāç**.

carc, repeat.
One apparent deriv., S.

cup, stir.
One doubtful deriv., V. B.

cumb, kiss.

cur, steal.
One deriv., B. (TA.) +

chur, scatter.
Only pple in E.

ḍī, fly.
Later form of **dī**.

ḍhāuk, approach.
Only pple in E.

tark, think.
Deriv., B. +

tarj, threaten.

tim, be quiet.
Apparently related with **tam**.

tul, lift, weigh.
Deriv., B. +

trap, be abashed.
Doubtful deriv., V. +

dal, burst.
Secondary, from 1 **dṛ**; deriv., B. +

dhukṣ, kindle.
Only with prefix **sam**.

puth, crush.

3 **pṛ**, be busy.
Only with prefix **ā**; doubtless specialized form of 1 or 2 **pṛ**.

pluṣ, burn.
One doubtful deriv., V. B.

1 **phal**, burst.
Deriv., V. +

2 **phal**, fruit.
One apparent deriv., V. +

bhaṣ, bark.
One deriv., B.

maṇḍ, deck.
One deriv., B.

mārg, chase.
Really denom. of **mārga**, 'track.'

rac, produce.

raṭ, howl.

1 **rās**, roar.
One doubtful deriv., B. +

rūṣ, strew.
One very doubtful deriv., V. +

lal, sport.

laṣ, desire.
Almost only with prefix **abhi**.

las, be lively.
One doubtful deriv., B. +

luñc, tear out.
One deriv., B.

2 **luṭh**, **luṇṭh**, rob.

lul, be lively.
The same with **luḍ**.

loc, see, consider.
The same with **lok**.

vīj, vyaj, fan.
Perhaps from **aj + vi**.

vṛṅh, bṛṅh, roar.

vrīḍ, be ashamed.

vell, stagger.
Only pple in E.

stim, be stiff.
Only pple; compare **styā**.

hreṣ, neigh.

K. *Roots found only in the Epics.*

kṣup, be startled (?).
No real root.

glah, gamble.
Doubtless from **grah**; deriv., AV. +

jam.
Only once; artificial.

ruṭh, torment.
Only once; probably the same with **luṭh**.

L. *Roots found only in the Classical Language.*

añg, move.
Only once; doubtless artificial.

aṇṭh, visit.
Probably artificial.

āñch, pull, tear.
Probably artificial.

kās, cough.
Doubtless denom.; apparent deriv., AV. C.

kuñj, rustle.
Only once; probably bad reading or artificial.

kuṇṭh, dull.
Doubtless denominative.

kuth, stink.
One apparent deriv., B.

kūṇ, shrink.

kland, cry out.
Side-form to **krand**; one deriv., AV.

klav, stammer.
Probably artificial.

kvaṇ, sound.

kṣmā, tremble.
Only once; probably artificial.

khañj, limp.

khall, be relaxed.

galbh, dare.
With prefix **pra**; doubtless denom. of **pragalbha** (B. +).

guñj, hum.

gumph, twine.

cak, quake.

cañc, dance.

caṭ, be located (?).

culump, suck in.
Once; artificial.

cūṣ, draw, suck.
Deriv., also in E.

chuṭ, chuḍ, wrench.

jagh, devour (?).
Only once.

jhaṭ, confuse.
Only once; probably artificial.

jhaṇ, sound.
Only once; probably artificial.

jhar, fall.
Deriv., also in E.

ṭañk, cover (?).
Probably denom. of **ṭañka** (E. +).

ṭal, be confused.
Only once; probably artificial.

ṭīk, trip.
An occurrence or two, probably artificial.

ḍam, sound.
Only once; probably artificial.

ḍamb, mock.
Only with prefix **vi**.

ḍval, mix.
Probably artificial.

ti, crush.
Only once; probably a false reading.

truṭ, come to pieces.
Probably denom. from **truṭi** (E. +).

tvañg, leap.

dul, raise.
Probably denom. of **dola** (E. +).

dyu, attack.
Once; doubtless artificial.

drāḍ, split.
Once; doubtless artificial.

naṭ, dance, play.
Prakritized form of **nṛt**; one deriv., also E.

pard, *pedere.*
Though genuine and original, only quotable once.

puṭ, wrap, etc.
Probably denom. of **puṭa** (B. +).

phakk, swell (?).
Only once; doubtless artificial.

bul, immerse.
Only once; doubtless artificial.

bhaṭ, hire.
Denom. of the prakritized **bhaṭa** (E. +).

mañc, cleanse (?).
Denom. of **mañca** (E. +), or artificial.

maṇ, sound.
Ungenuine.

muṭ, break.

rañg, rock.
Only once; doubtless artificial.

2 ran, ring.

2 rambh, roar.
An occurrence or two; probably artificial.

riñkh, **riñg**, creep.

laḍ, move about.
Only once; probably artificial.

lam, take pleasure.
A sporadic variant to **ram**.

lā, grasp.
The few cases probably artificial.

lāñch, mark.
Only pple and one derivative.

1 luṭh, roll.

vaṭ, crush.
Only once; probably artificial.

vaṇṭ, divide.
Only once; probably artificial.

val, turn.
Deriv., also E.

vāh, press.
No derivatives.

vyay, expend.
Probably denom. of **vyaya**.

vran, sound.
Only once; doubtless artificial.

vruḍ, sink.
An occurrence or two doubtless artificial.

çal, leap.
Only with prefix **ud**; goes back to **çrī**, **çṛ**.

çaç, leap.
Doubtless denom. from **çaça** (V. +).

çlath, slacken.
Later form of **çrath**.

sthag, cover.

sphaṭ, split.
One doubtful deriv., B. +

had, *cacare.*
One deriv., also E.

hikk, sob.
Probably imitative; one deriv., also E.

hiṇḍ, be empty.
Deriv., E. +

M. *Roots inferred from Derivatives only.*

aṅh, be narrow or distressing.
Deriv., V. +

iḍ.
Deriv., V. +

2 ṛj, shine.
Deriv., V. +

ṛç, harm.
Deriv., V. +; one doubtful verbal form in B.

kru, be rough or raw.
Deriv., V. +

tuc, impel, generate.
Deriv., V. +

tvac, cover.
Deriv., V. +

2 dū, be distant.
Deriv., V. +

dvar, pass through.
Deriv., V. +

nīḍ, nest.
Deriv., V. +

nṛ, sport.
Deriv., V. +

2 paç, bind.
Deriv., V. +

pṛt, fight.
Deriv., V. +

pṛç, **pṛṣ**, touch (?).
Deriv., V. +

2 bal, be strong.
Deriv., V. +

yah, be quick (?).
Deriv., V.

rañch, mark.
Deriv., C.
raph, be miserable (?).
Deriv., V.
raç, be straight (?).
Deriv., V. +
çip, be smooth.
Deriv., V. +
2 **si**, **sī**, hurl (?).
Deriv., V. +
sṛk, be pointed.
Deriv., V. +
stā, be stealthy.
Deriv., V. +
2 **stu**, drip.
Deriv., V. +
2 **har**, **hir**, be yellow.
Deriv., V. +

NOTE.

The following Index, like the classes of roots preceding, is arranged in the order of the Sanskrit alphabet: the vowels first, **a ā i ī u ū ṛ e āi o āu**; then the anusvāra, or **ṁ**; then the five classes of mutes, or **k kh g gh ñ**, **c ch j jh ñ**, **ṭ ṭh ḍ ḍh ṇ**, **t th d dh n**, **p ph b bh m**; then the semi-vowels, sibilants, and aspirate, or **y r l v**, **ç ṣ s**, and **h**. It is to be noted that the roots here written with the vowel **ṛ** are often (e.g. by the Petersburg Lexicon) written instead with **ar**, thus: **ar**, **kar**, **kart**, instead of **ṛ**, **kṛ**, **kṛt**; in a few cases, with **ra**, as **krap** instead of **kṛp**.

To each root is here added the letter designating the class as given above, also the page, and the column (a or b) where it may be found. It should be remembered that classes **A**, **B**, **C**, and **D** contain the roots which have the best chance to be Indo-European; the roots of the succeeding classes (except **M**) have that chance in a constantly decreasing proportion.

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nard	E. 19 a	pūj	H. 20 a	bhaṣ	J. 21 b	mī	A. 13 a
1 naç	A. 12 a	pūy	F. 19 a	bhas	A. 12 b	mīl	A. 13 a
2 naç	C. 16 b	1 pṛ	A. 12 a	bhā	A. 12 b	mīv	B. 15 b
nas	D. 17 b	2 pṛ	A. 12 a	bhām	C. 16 b	muc	A. 13 a
nah	A. 12 a	3 pṛ	J. 21 b	bhāṣ	E. 19 a	muṭ	L. 23 a
nāth	A. 12 a	pṛc	A. 12 a	bhās	A. 12 b	mud	A. 13 a
nādh	C. 16 b	pṛt	M. 23 b	bhikṣ	A. 12 b	muṣ	A. 13 a

muh	A. 13 a	rañch	M. 24 a	rej	C. 17 a	valh	E. 19 b
mū	B. 15 b	rañj	A. 13 a	reḍ	F. 19 b	vaç	A. 13 b
mūrch	A. 13 a	raṭ	J. 21 b	lakṣ	E. 19 a	1 vas	A. 13 b
1 mṛ	A. 13 a	raṇv	C. 16 b	lag	E. 19 b	2 vas	A. 13 b
2 mṛ	C. 16 b	rad	C. 16 b	lañgh	H. 20 b	3 vas	A. 13 b
mṛkṣ	A. 13 a	radh	A. 13 a	lajj	E. 19 b	vah	A. 13 b
mṛc	B. 15 b	1 ran	C. 16 b	laḍ	L. 23 a	1 vā	A. 13 b
mṛch	G. 20 b	2 ran	L. 23 a	lap	A. 13 b	2 vā	A. 14 a
mṛj	A. 13 a	randh	A. 13 a	labh	A. 13 b	3 vā	A. 13 b
mṛḍ	A. 13 a	rap	C. 16 b	lam	L. 23 a	vāñch	A. 14 a
mṛṇ	C. 16 b	rapç	D. 18 a	lamb	E. 19 b	vāç	A. 14 a
mṛd	A. 13 a	raph	M. 24 a	lal	J. 21 b	vāh	L. 23 b
mṛdh	B. 15 b	rabh	A. 13 a	laṣ	J. 21 b	vi	A. 14 a
mṛç	A. 13 a	ram	A. 13 a	las	J. 21 b	1 vic	A. 14 a
mṛṣ	A. 13 a	ramb	D. 18 a	lā	L. 23 a	2 vic	C. 17 a
med	A. 13 a	1 rambh	A. 13 a	lāñch	L. 23 a	vij	A. 14 a
mokṣ	A. 13 a	2 rambh	L. 23 a	likh	A. 13 b	1 vid	A. 14 a
mnā	H. 20 b	raç	M. 24 a	lip	A. 13 b	2 vid	A. 14 a
myakṣ	D. 18 a	ras	E. 19 a	limp	A. 13 b	1 vidh	A. 14 a
mrit	F. 19 a	rah	H. 20 b	liç	F. 19 b	2 vidh	A. 14 a
mruc	A. 13 a	1 rā	A. 13 b	lih	E. 19 b	vindh	D. 18 b
mreḍ	E. 19 a	2 rā	C. 16 b	1 lī	A. 13 b	vip	A. 14 a
mlā	A. 13 a	rāj	A. 13 b	2 lī	F. 19 b	viç	A. 14 a
mlit	F. 19 a	rādh	A. 13 b	luñc	J. 21 b	viṣ	A. 14 a
mluc	A. 13 a	1 rās	J. 21 b	1 luṭh	L. 23 b	viṣṭ	A. 14 a
mlup	A. 13 a	2 rās	A. 13 b	2 luṭh	J. 21 b	1 vī	C. 17 a
mlech	E. 19 a	ri	B. 15 b	luḍ	H. 20 b	2 vī	A. 14 a
yakṣ	A. 13 a	rikh	D. 18 a	luṇṭh	J. 21 b	vīj	J. 22 a
yach	A. 13 a	riñkh	L. 23 a	lup	A. 13 b	vīḍ	B. 16 a
yaj	A. 13 a	riñg	L. 23 a	lubh	A. 13 b	1 vṛ	A. 14 a
yat	A. 13 a	ric	A. 13 b	lul	J. 21 b	2 vṛ	A. 14 a
yabh	A. 13 a	rip	D. 18 a	lū	E. 19 b	vṛṅh	J. 22 a
yam	A. 13 a	riph	A. 13 b	lok	E. 19 b	vṛj	A. 14 a
yas	A. 13 a	ribh	A. 13 b	loc	J. 22 a	vṛt	A. 14 a
yah	M. 23 b	riç	C. 17 a	vakṣ	D. 18 b	vṛdh	A. 14 a
yā	A. 13 a	riṣ	A. 13 b	vac	A. 13 b	vṛṣ	A. 14 a
yāc	A. 13 a	rih	B. 15 b	vaj	B. 15 b	vṛh	A. 14 a
yād	D. 18 a	rī	B. 15 b	vañc	A. 13 b	ven	C. 17 a
1 yu	A. 13 a	1 ru	A. 13 b	vaṭ	L. 23 b	vep	A. 14 a
2 yu	B. 15 b	2 ru	C. 17 a	vaṇṭ	L. 23 b	vell	J. 22 b
yuch	B. 15 b	ruc	A. 13 b	vat	D. 18 b	veṣṭ	A. 14 a
yuj	A. 13 a	ruj	A. 13 b	vad	A. 13 b	vyac	C. 17 a
yudh	A. 13 a	ruṭh	K. 22 b	vadh	A. 13 b	vyaj	J. 22 a
yup	B. 15 b	rud	A. 13 b	van	A. 13 b	vyath	A. 14 a
yeṣ	A. 13 a	1 rudh	D. 18 a	vand	A. 13 b	vyadh	A. 14 a
raṅh	B. 15 b	2 rudh	A. 13 b	1 vap	A. 13 b	vyay	L. 23 b
rakṣ	A. 13 a	rup	C. 17 a	2 vap	B. 16 a	vyā	A. 14 a
rañg	L. 23 a	ruṣ	A. 13 b	vam	A. 13 b	vraj	A. 14 a
rac	J. 21 b	ruh	A. 13 b	val	L. 23 b	vrad	D. 18 b
raj	A. 13 a	rūṣ	J. 21 b	valg	A. 13 b	vran	L. 23 b

vrand	D. 18 b	çnath	D. 18 b	sū	A. 14 b	smṛ	A. 15 a
vraçc	A. 14 a	çyā	A. 14 b	sūd	A. 14 b	syad	A. 15 a
vrādh	D. 18 b	çrath	A. 14 b	sūrkṣ	F. 19 b	syand	A. 15 a
vrīḍ	J. 22 a	çran	H. 20 b	sṛ	A. 14 b	syū	A. 14 b
vruḍ	L. 23 b	çram	A. 14 b	sṛk	M. 24 b	sraṅs	A. 15 a
vlag	D. 18 b	çrambh	H. 20 b	sṛj	A. 14 b	sras	A. 15 a
vlañg	D. 18 b	çrā	A. 14 b	sṛp	A. 14 b	sridh	D. 18 b
vlī	B. 16 a	çri	A. 14 b	sev	A. 14 b	srīv	C. 17 b
çaṅs	A. 14 a	çriṣ	A. 14 b	skand	A. 14 b	sru	A. 15 a
çak	A. 14 a	1 çrī	C. 17 a	skabh	A. 14 b	svaj	A. 15 a
çañk	E. 19 b	2 çrī	A. 14 b	skambh	A. 14 b	svañj	A. 15 a
çat	A. 14 a	çru	A. 14 b	sku	C. 17 b	svad	A. 15 a
1 çad	D. 18 b	çruṣ	D. 18 b	skṛ	A. 10 a	svan	A. 15 a
2 çad	B. 16 a	çlath	L. 23 b	skhal	E. 19 b	svap	A. 15 a
çap	A. 14 a	çlā	G. 20 b	stan	A. 14 b	svar	A. 15 b
1 çam	B. 16 b	çlāgh	E. 19 b	stabh	A. 14 b	svād	A. 15 a
2 çam	A. 14 a	çliṣ	A. 14 b	stambh	A. 14 b	svid	A. 15 b
3 çam	H. 20 b	çvañc	C. 17 b	stā	M. 24 b	had	L. 23 b
çal	L. 23 b	çvas	A. 14 b	stigh	G. 20 b	han	A. 15 b
çaç	L. 23 b	çvā	A. 14 a	stim	J. 22 b	1 har	C. 17 b
ças	A. 14 a	çvi	A. 14 a	stī	E. 19 b	2 har	M. 24 b
çā	A. 14 a	çvit	D. 18 b	1 stu	A. 14 b	has	E. 19 b
1 çās	A. 14 a	ṣṭhīv	A. 14 b	2 stu	M. 24 b	hā	A. 15 b
2 çās	A. 14 a	sagh	B. 16 b	stubh	A. 14 b	hās	D. 18 b
çi	A. 14 a	sac	C. 17 b	stṛ	A. 14 b	hi	A. 15 b
çiñj	A. 14 a	saj	A. 14 b	stṛh	I. 21 b	hiṅs	A. 15 b
çip	M. 24 a	sañj	A. 14 b	styā	E. 19 b	hikk	L. 23 b
çim	B. 16 b	sad	A. 14 b	sthag	L. 23 b	hiṇḍ	L. 23 b
1 çiṣ	A. 14 a	sadh	A. 14 b	sthā	A. 14 b	hir	M. 24 b
2 çiṣ	A. 14 a	san	B. 16 b	snā	A. 15 a	hīḍ	A. 15 b
1 çī	B. 16 b	sap	C. 17 b	snih	A. 15 a	hu	A. 15 b
2 çī	A. 14 a	sarj	C. 17 b	snu	E. 19 b	hur	A. 15 b
3 çī	A. 14 b	sas	A. 14 b	spand	A. 15 a	hū	A. 15 b
çuc	A. 14 a	sah	A. 14 b	spaç	A. 12 a	hūrch	G. 20 b
çuj	D. 18 b	1 sā	A. 14 b	spūrdh	A. 15 a	1 hṛ	A. 15 b
çudh	A. 14 a	2 sā	B. 16 b	spṛ	B. 16 b	2 hṛ	C. 17 b
çundh	A. 14 a	sādh	A. 14 b	spṛdh	A. 15 a	hṛṣ	A. 15 b
çubh	A. 14 a	1 si	A. 14 b	spṛç	A. 15 a	hel	A. 15 b
çumbh	A. 14 a	2 si	M. 24 a	spṛh	A. 15 a	heṣ	A. 15 b
1 çuṣ	A. 14 a	sic	A. 14 b	sphaṭ	L. 23 b	hnu	A. 15 b
2 çuṣ	A. 14 b	1 sidh	A. 14 b	sphal	E. 19 b	hras	H. 20 b
çū	A. 14 a	2 sidh	A. 14 b	sphar	A. 15 a	hrād	E. 19 b
1 çṛ	A. 14 b	sī	M. 24 a	sphā	E. 19 b	hrī	A. 15 b
2 çṛ	A. 14 b	sīv	A. 14 b	sphuṭ	E. 19 b	hru	A. 15 b
3 çṛ	A. 14 b	1 su	A. 14 b	sphur	A. 15 a	hreṣ	J. 22 b
4 çṛ	C. 17 a	2 su	A. 14 b	sphul	A. 15 a	hlād	E. 19 b
çṛdh	A. 14 b	subh	G. 20 b	sphūrj	A. 15 a	hval	E. 19 b
çcand	D. 18 b	sumbh	G. 20 b	sphṛ	A. 15 a	hvā	A. 15 b
çcut	A. 14 b	sul	G. 20 b	smi	A. 15 a	hvṛ	A. 15 b

II. — *On the Feminine Caesura in Homer.*

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THE importance of the caesura in the third foot of the Homeric verse is doubted by no one. According to Lehrs, only 219 verses of the Iliad and 95 of the Odyssey lack this pause, as διογενὲς Λαερτιάδη πολυμήχαν' Ὀδυσσεῦ. In the first two books of the Odyssey (878 verses) no verse is without a caesura in the third foot.

But in this third foot, the caesura falls sometimes after the ictus-syllable, and sometimes between the two short syllables. Which is the normal pause, the catalectic or the trochaic close, — the masculine or the feminine caesura? Scholars should be agreed at least upon the relative frequency of these caesuras, and the only questions should be as to which was the original caesura and as to which was preferred by the poet; since Bekker's investigations have called attention to the fact that the poet sometimes preferred a combination or arrangement of rhythms which the material of the language hindered from being the most frequent arrangement. Experience with several Freshman classes has made it clear that in our country teachers of Homer do not regard as settled the first point, viz. the relative frequency of the masculine and feminine caesura in the third foot. Most boys who come to college consider the penthemimeral to be the prevalent caesura; and a large number make a pause after the first syllable of the third foot, whether a word ends there or not. This is probably the result of habits contracted in scanning Vergil. Whatever the cause, it is a misapprehension, and one that is wide spread.

For the prevalence of the view that the masculine is the normal caesura, Gottfried Hermann is largely responsible. Little attention seems to have been paid to the subject before him. In his admirable metrical essays, admirable because of their method, published in his "Orphica" (1805), he

says that Homer and the early Epic poets preferred the caesural pause after the first syllable of the third foot: "Usque ad hanc [Nonni] aetatem poëtae epici masculos Homeri numeros secuti, caesuram fere usurpaverant eam quae est in prima tertii pedis syllaba." (p. 690.) "Caesuram supra diximus Homero et antiquis epicis hanc maxime placuisse quae est in prima tertii pedis syllaba: *μῆνιν ἄειδε, θεά.* Qua illi quidem ita sunt usi ut non modo saepe trochaeum isto in loco ponerent: *ἄνδρα μοι ἔννεπε, Μοῦσα,* sed plurimas etiam alias admitterent incisiones. Quamquam illa prior caesura, quae in prima est pedis syllaba principatum obtinuit. Illum igitur morem servarunt poetae omnes usque ad Nonni aetatem. Hinc certo argumento colligimus, Orpheum, qui antiquam in caesuram consuetudinem retinuerit, Nonno antiquiorem esse." (p. 692.) Hermann repeats these statements in his "Elementa Doctrinae Metricae" (1816). "Hic mihi hoc tantum commemorandum est, inde ab Homero usque ad quintum a Christo saeculum poëtas epicos hac forma usos esse quae et spondeos promiscue cum dactylis commutatos et caesuram potissimum habet masculam illam quae *πενθημιμερής* a grammaticis vocatur, quae est in tertii pedis arsi. . . . Tum exstitit vir fervidioris ingenii, et in primis ad poësin factus, Nonnus Panopolitanus, qui edito ingenti volumine Dionysiacorum omnes, qui tum vivebant, poëtas ita praestinxit, ut quasi novus Homerus haberetur. Is dactylum rarius spondeo cedere passus, caesuram regnare voluit eam, quae a grammaticis *κατὰ τρίτον τροχαῖον* vocatur: quo volubilitatem, quam consectabatur, huic versui conciliavit admirabilem. . . . Hunc igitur, ut priores Homerum, ita, qui post eum fuerunt, omnes exemplum sibi sumpserunt, ut vel ex numeris aetatem eorum conicere possimus." (p. 333.) "Septima [caesura], quam *πενθημιμερῆ* vocant, in tertia arsi est. . . . Hanc supra ostendimus propriam esse versus heroici caesuram, eaque inde ab Homero apud epicos pariter ac ceteros, qui hexametro usi sunt, legitima habita est. Idque in mente habuisse puto Varronem apud Gellium XVIII. 15 quum dixit omnimodo in quinto semipede verbum terminari: quare iniuria reprehensus ille est a Mureto in *Var. Lect.* XI. 6" [who simply cited *A* 2 and *a* 1 to show that the femi-

nine caesura might be used]. (p. 336.) "Octava caesura, quam *κατὰ τρίτον τροχαῖον* grammatici vocant, ut supra dictum est, ab Nonno, et qui hunc secuti sunt, ut legitima usurpatur. . . . Ita fere ubique eam usurpatam videas in Moschi epitaphio Bionis." (p. 337.) Spitzner "De versu Graecorum heroico," published in the same year as Hermann's "Elementa," corrected Hermann's view that the feminine caesura belonged to the last age of Greek poetry, and asserted that although different books vary, and the masculine caesura predominates in some, yet on the whole the feminine caesura is the more frequent in Homer: of the first book of the Iliad, 7 verses have no caesura in the third foot, 289 verses have the penthemimeral caesura, and 315 verses have the feminine caesura. (This recognizes a caesura before an enclitic, as *μηδ' οὕτως ἀγαθός περ ἐὼν κτλ. A* 131. Bekker reckons for *A* 298 penthemimeral caesuras, 307 feminine caesuras, 6 verses without caesura in the third foot; Monro counts 247 masculine, 356 feminine caesuras, 8 verses without caesura in the third foot; Allen counts 246 masculine, 357 feminine caesuras. The difference in the enumerations is explained by the difference of principles followed. At first the endeavor was to make out as many masculine caesuras as possible, even at the cost of separating enclitics from the words on which they leaned.)

Later works on metres naturally enough followed Hermann. The American edition of Munk says: "Among all the caesuras, the *πενθημιμερής* is the most common; the punctuation also falls upon it. . . . The caesura after the third trochee has less power." (That is, I suppose, the feminine caesura does not, like the *πενθημιμερής*, lengthen a preceding syllable.) Thus also Anthon in his "Prosody," p. 90, says, "The favorite caesura of the Homeric hexameter falls after the first syllable of the third foot." Thus we find in our grammars the statement that "the most common caesura is after the arsis of the third foot." Even Christ of Munich, after noting the avoidance of the feminine caesura by Latin poets, says only, "in Homer, on the other hand, the trochaic caesura is by no means uncommon."

I will give a brief statement of facts. The enumeration of

the Homeric caesuras I take from Professor Allen's able article on the Homeric verse, in Kuhn's Zeitschrift, Vol. XXIV. The other numbers are from a fairly careful count.

	Feminine Caesuras.	Masculine Caesuras.	Per cent of Feminine Caesuras.
A	351	246	59
Γ	243	210	53
Λ	485	349	58
α	267	177	60
ζ	184	144	56
ι	291	272	52
Hom. Hym. Delian Ap.	92	71	56
Hom. Hym. Pyth. Ap.	195	168	54
Hom. Hym. Dionysus VII.	32	27	54
Hesiod, Theog. (200 vs.)	135	65	67
Hesiod, Works and Days (200 vs.)	127	73	63
[Hesiod], Shield (101–200 vs.)	55	45	55
Cyclic Poets, Cypria, etc. (200 vs.)	103	97	52
Panyassis (50 vs.)	18	32	36
Antimachus, Thebaid (50 vs.)	22	28	44
Batrachomyomachia	148	143	51
Theocritus I.	63	76	45
(But in the narrative	36	36	50)
Theocritus VII.	86	65	57
Theocritus XV.	77	71	53
Theocritus XVI.	77	32	71
Bion, Adonis	75	17	82
(or, without refrain	65	17	80)
Moschus, Epitaphius	78	48	62
(or, without refrain	78	32	70)
Apoll. Argon. (B 1–300)	195	105	65
Orphic Argon. (600 vs.)	350	250	58
Orphic Lithica (400 vs.)	250	150	62
Nonnus, Dion. (B 1–100)	88	12	88
Nonnus, Paraphr. (B 1–100)	89	11	89
Quintus Smyrn. (B 1–100)	82	18	82
Musaeus, Hero (100 vs.)	73	27	73

A glance at the table above shows that the difference, as regards caesura, between the earlier and later hexameters is not so great as Hermann thought, and not nearly so great as the difference between the Homeric verses and those of the Latin poets Vergil, Horace, and Ovid, in which only from 6 to 20 per cent of the verses have the feminine caesura in the third foot. I may fairly add that recent text criticism (on

other grounds) would give the feminine caesura to many Homeric verses which have been counted on the other side.

That the material of the language did not force the Greek poets to the use of the feminine caesura is shown by the very simple fact that this pause is found in the first foot only about half as often as the masculine caesura; in the second foot only about one fifth or one sixth as often as the masculine caesura; while the feminine caesura of the fourth foot is called the forbidden pause of the verse, although it occurs occasionally. The freedom with which the poet allowed hiatus between the two short syllables of the third foot is another familiar indication of the importance of this pause.

One other argument for the importance of this feminine caesura of the third foot may be drawn from the large number of tags of verses which are suited to follow it. These tags in many cases may well have been part of the poet's inheritance from an earlier generation, e. g. *ποδάρκης δῖος Ἀχιλλεύς*, since the epithet *swift-footed* seems to have been derived from some incident which is not found in the Iliad. We do not degrade the bard's position by recognizing the convenience which such tags must have been to him. Much has been written to show the exact meaning of each adjective and the shade of difference in the poet's mind; no one likes to confess that he fails to perceive distinctions which are drawn by others, but the evidence is clear in this case: The convenience of the verse decided the choice between different forms of the same word, between essentially synonymous words, and between expressions of general applicability. Thus the convenience of the verse decided whether the poet should say *ὣς ἔφατ'* (before a vowel) or *ὣς φάτο* (before a consonant); it decided between *ἔμμεναι* (— ∪ ∪), *ἔμεναι* (∪ ∪ —), *ἔμμεν* (— ∪), *ἔμεν* (∪ ∪), and *εἶναι* (— —); between *ἕκατος* (∪ ∪ —, *A* 385), *ἑκάεργος* (∪ ∪ — ∪, *A* 479), *ἑκηβόλος* (∪ — ∪ ∪, *A* 14), *ἑκατηβόλος* (∪ ∪ — ∪ ∪, *A* 370), and *ἑκατηβελέτης* (∪ ∪ — ∪ ∪ —, *A* 75); between *ἐβλάφθησαν*, *Ψ* 387, and *ἔβλαβεν*, *Ψ* 461; between *ἱερὴ ἷς Τηλεμάχοιο* (*β* 409, after the masculine caesura), and *Ὀδυσσῆος φίλος υἱός* (*β* 415, after the feminine caesura); between *ἐρρύσατο καὶ ἐσάωσεν*, *O* 290 and *ἐρύσατο καὶ ἐσάωσεν*, *χ* 372; between *ἰδὲ Ξάνθοιο*

ῥοάων, *Z* 4, and *ἠδὲ Ξάνθοιο ῥοάων*, *Θ* 560; between *φάνη ῥοδοδάκτυλος Ἠώς*, *Ψ* 109, and *ἐφάνη ῥοδοδάκτυλος Ἠώς*, *Z* 175; between *μέγ' ἄριστον*, *B* 274, *ὄχ' ἄριστος*, *A* 69, and *ἔξοχ' ἄριστοι*, *γ* 158; between *ἐὺ φρονέων*, *A* 73, and *φίλα φρονέων*, *Δ* 219; between *ἐχέφρων Πηνελόπεια*, *ρ* 390, and *περίφρων Πηνελόπεια*, *ρ* 492; between *ἀνὰ ἄστυ* and *κατὰ ἄστυ* (cf. *Z* 505 with 512); between *υἷες Ἀχαιῶν*, *B* 281, and *κοῦροι Ἀχαιῶν*, *B* 562; between *ὕφορβος*, *π* 333, and *συβώτης*, *π* 302; between *διάκτορι Ἀργειφόντῃ*, *B* 103, and *ἐυσκόπῳ Ἀργειφόντῃ*, *η* 137. I would even venture to add, that the poet generally has no special design in selecting a name for the Greeks, but says *Ἀχαιοί* (⏑ — —), *Δαναοί* (⏑ ⏑ —), or *Ἀργεῖοι* (— ⏑ ⏑ —), according to the convenience of his metre: no form of *Ἀχαιοί* can begin a verse, no form of *Ἀργεῖοι* can close a verse; cf. *οἱ δ' ἐλελίχθησαν καὶ ἐνάντιοι ἔσταν Ἀχαιῶν | Ἀργεῖοι δ' ὑπεχώρησαν*, *Z* 106 f., where the *Ἀργεῖοι* is simply anaphoric of *Ἀχαιῶν*. We can construct a paradigm for the inflection of several important proper names with accompanying adjectives. For instance, —

ποδάρκης δῖος Ἀχιλλεύς.	*πολύτλας δῖος Ὀδυσσεύς.*
ποδώκεος Αἰακίδαο.	*Ὀδυσσῆος θείοιο,*
	or *Λαερτιάδεω Ὀδυσῆος.*
ποδάρκεϊ Πηλεΐωνι.	*Ὀδυσσῆι πτολιπόρθῳ.*
ποδώκεα Πηλεΐωνα,	*Ὀδυσσῆα πτολίπορθον.*
or *Ἀχιλλῆα πτολίπορθον.*	

We may compare *εὐρὺ κρείων Ἀγαμέμνων* with the genitive *Ἀγαμέμνονος Ἀτρείδαο*, and the dative *Ἀγαμέμνονι ποιμένι λαῶν*. The genitive of *ἱερὸν μένος Ἀλκινόοιο*, *η* 167, is *μεγαλήτορος Ἀλκινόοιο*; the genitive of *Καλυψὼ δῖα θεάων*, *α* 14, is *Καλυψοῦς ἠυκόμοιο*, *θ* 452. It is seldom possible to say why *κάρη κομόωντες Ἀχαιοί* should be used rather than *ἐυκνήμιδες Ἀχαιοί* (of which, in turn, *Ἀχαιῶν χαλκοχιτώνων* is the genitive), except that one tag begins with a consonant, and is possible only after a final vowel, while the other tag begins with a vowel and would make a hiatus if it followed a final vowel. Much labor has been wasted in the attempt to state the shade of difference of meaning between *δῖος* and *θέϊος* (*θεῖος*); but *Ὀδυσσῆος θείοιο* is simply the genitive of *δῖος*

'Οδυσσεύς. In some instances a tag has been transferred to another grammatical case; thus *μερόπων ἀνθρώπων* (repeated nine times) was thought to justify *μέροπες ἄνθρωποι*, Σ 288.

The importance of these tags in the study of the Homeric verse is evident on a glance at a list of the tags which appear five or more times in the Homeric poems. In making this list, Schmidt's "Parallel-Homer" has been of great service. In a few cases I have corrected his work. Doubtless some tags have escaped my notice, but I believe this collection to be substantially complete.

The tags adapted to follow the hephthemimeral caesura alone are so unimportant in number that it is unnecessary to give them in detail. The tags fitted to follow the Bucolic diaeresis, like *Παλλὰς 'Αθήνη, Φοῖβος 'Απόλλων, μητίετα Ζεύς, δῖα θεάων, δῖος 'Οδυσσεύς, ἕρκος 'Αχαιῶν, φαίδιμος Ἕκτωρ*, are exceedingly common: this diaeresis in no way comes into competition with the caesura of the third foot, but is very often used in conjunction with it, as the tags show.

In order to bring the more important tags together into prominence, I have separated from the rest those which occur ten times or more. The asterisk marks the clauses which are not true, independent tags: of these more will be said later.

A. — *Feminine Tags repeated more than 9 times.*

* *ἀκὴν ἐγένοντο σιωπῇ*, 15 (Od. 5).
* *ἀκόντισε δουρὶ φαεινῷ*, 14 Il.
'Αλέξανδρος θεοειδής, 12 Il.
* *ἀμειβόμενος προσέειπον*, 27 (Il.).
ἀμύμονα Πηλείωνα, 10 (Od. 3).
[*ἀμύμονος Αἰακίδαο κτλ.*, 10 (Od. 4)].
ἄναξ ἀνδρῶν 'Αγαμέμνων, 48 (Od. 3).
'Αρηΐφιλος Μενέλαος, 21 (Od. 1).
'Αχαιῶν χαλκοχιτώνων, 24 (Od. 2).
βόας καὶ ἴφια μῆλα, 10 (Il. 4).
βοὴν ἀγαθὸς Διομήδης, 21 Il.
βοὴν ἀγαθὸς Μενέλαος, 25 (Od. 9).
βοῶπις πότνια Ἥρη, 14 Il.
Γερήνιος ἵππότα Νέστωρ, 31 (Od. 10).
διάκτορος 'Αργεϊφόντης, 15 (Od. 7).
διοτρεφέες βασιλῆες, 14 (Od. 4).
δόμους εὐναιετάοντας, 10 (Il. 3).
* *ἐδήσατο καλὰ πέδιλα*, 12 (Il. 5).
* *ἐδητύος ἐξ ἔρον ἕντο*, 22 (Il. 7).
ἐν αἰνῇ δηιοτῆτι, 10 (Od. 3).
ἐνὶ κρατερῇ ὑσμίνῃ, 11 (Od. 1).
* *ἐνὶ φρεσὶ βάλλεο σῇσιν*, 14 (Od. 7).
ἐπ' ἀλλήλοισιν ἰόντες, 12 Il.
ἐπ' εὐρέα νῶτα θαλάσσης, 10 (Il. 3).
* *ἔπεα πτερόεντα προσηύδα*, 12 (Il. 3).
ἐπὶ ῥηγμῖνι θαλάσσης, 11 (Il. 2).
* *ἔπος τ' ἔφατ' ἔκ τ' ὀνόμαζεν*, 43 (Il. 17).
ἐς ἠέλιον καταδύντα, 12 (Il. 3).
ἐυκνήμιδες 'Αχαιοί, 36 (Od. 5).
ἐυκτίμενον πτολίεθρον, 10 (Od. 3).
θεὰ γλαυκῶπις 'Αθήνη, 52 (Il. 20).
θεὰ λευκώλενος Ἥρη, 19 Il.

θοὰς ἐπὶ νῆας Ἀχαιῶν, 10 Il.
καὶ ἀτρεκέως κατάλεξον, 17 (Il. 4).
Καλυψὼ δῖα θεάων, 11 Od.
κάρη κομόωντες Ἀχαιοί, 29 (Od. 2).
κατὰ φρένα καὶ κατὰ θυμόν, 21 (Il. 10).
Λαερτιάδεω Ὀδυσῆος, 11 Od.
μέγας κορυθαίολος Ἕκτωρ, 12 Il.
μέγας Τελαμώνιος Αἴας, 12 Il.
* μέλαιναι νῆες ἕποντο, 10 Il.
Μενοιτίου ἄλκιμος υἱός, 12 Il.
Ὀδυσσῆος θείοιο, 27 (Il. 3).
πατὴρ ἀνδρῶν τε θεῶν τε, 15 (Od. 3).
πατὴρ καὶ πότνια μήτηρ, 12 (Od. 4).
περίφρων Πηνελόπεια, 40 Od.
ποδάρκης δῖος Ἀχιλλεύς, 21 Il.
ποδώκεα Πηλείωνα, 12 Il.
ποδώκεος Αἰακίδαο, 10 (Od. 2).
πολύτλας δῖος Ὀδυσσεύς, 42 (Il. 5).
Ποσειδάων ἐνοσίχθων, 24 (Od. 11).
Ποσειδάωνι ἄνακτι, 11 (Il. 4).
* προκείμενα χεῖρας ἵαλλον, 15 (Il. 3).
* πρὸς ἀλλήλους ἀγόρευον, 25 (Il. 8).
πρὸς ὃν μεγαλήτορα θυμόν, 11 (Od. 4).
σὺν ἀμφιπόλοισι γυναιξίν, 13 Od.
τοὶ οὐρανὸν εὐρὺν ἔχουσιν, 14 (Il. 2).
* φάνη ῥοδοδάκτυλος Ἠώς, 25 (Il. 4).
φίλην ἐς πατρίδα γαῖαν, 31 (Od. 14).

B. — *Feminine Tags repeated* 5–9 *times.*

ἀγήρως ἤματα πάντα, 5 (Il. 1).
Ἀθηναίη τε καὶ Ἥρη, 7 Il.
Ἀθηναίη καὶ Ἄπολλον, 9 (Il. 4).
ἀκάχμενον ὀξέϊ χαλκῷ, 7 (Il. 3).
* ἀληθείην καταλέξω, 7 (Il. 1).
* ἀμείβετο δῖα θεάων, 5 Od.
ἅμ' ἠοῖ φαινομένηφιν, 8 (Il. 2).
ἀμύμονα ἔργα ἰδυῖαν, 5 (Od. 1).
* ἀμύνετο νηλεὲς ἦμαρ, 6 (Od. 1)
ἄναξ Διὸς υἱὸς Ἀπόλλων, 5 (Od. 1).
* ἀνείρεαι ἠδὲ (οὐδὲ) μεταλλᾷς, 7 (Il. 1).
ἀρήιοι υἷες Ἀχαιῶν, 7 (Od. 1).
* ἀριστεύεσκε μάχεσθαι, 5 Il.
* ἀρίστη φαίνετο βουλή, 9 (Od. 3).
Ἀχαιῶν ὅστις ἄριστος, 5 (Il. 1).
βίην Ἡρακλείην, 7 (Od. 1).
βίη τέ μοι ἔμπεδος εἴη, 5 (Od. 1).
βοὴ δ' ἄσβεστος ὀρώρει, 5 Il.
βοῶν ἐπιβουκόλος ἀνήρ, 5 Od.
Γερήνιος, οὖρος Ἀχαιῶν, 5 (Od. 1).
γέρων ἅλιος νημερτής, 5 Od.
[γέρων δ' ἱππηλάτα . . ., 9 (Od. 2).]
γέρων Πρίαμος θεοειδής, 5 Il.
δαΐφρονα ποικιλομήτην, 6 (Il. 1).
Δία Κρονίωνα ἄνακτα, 5 Il.
διὰ πρὸ δὲ χαλκὸν ἔλασσεν, 6 (Od. 1).
διιπετέος ποταμοῖο, 7 (Od. 3).
Διὸς θυγάτηρ Ἀφροδίτη, 9 (Od. 1).
Διὸς κοῦραι μεγάλοιο, 8 (Od. 2).
Διὸς νεφεληγερέταο, 6 Il.
Διὸς τέκος Ἀτρυτώνη, 7 (Od. 2).
* ἐάσομεν ἀχνύμενοί περ, 5 (Od. 1).
* ἕβαν οἰκόνδε ἕκαστος, 5 (Il. 1).
* ἐγείρομεν ὀξὺν Ἄρηα, 5 Il.
* ἐκέκλετο μακρὸν ἀύσας, 9 Il.
ἐμοὶ ἐρίηρες ἑταῖροι, 6 (Il. 1).
* ἐν Ἀργειοῖσιν ἔειπεν, 8 Il.
ἐν ἠεροειδέϊ πόντῳ, 6 Od.
ἐν ἡμετέροισι δόμοισιν, 5 Od.
ἐνὶ γαμπτοῖσι μέλεσσιν, 6 (Il. 2).
ἐνὶ μεγάροισι γυναῖκες, 7 (Il. 1).
ἐνὶ στήθεσσι φίλοισιν, 7 (Il. 3).
ἐπ' ἠεροειδέα πόντον, 5 (Il. 1).
* ἐπεὶ ἴδον ὀφθαλμοῖσιν, 5 (Il 1).
* ἐπέσσυτο δαίμονι ἶσος, 7 Il.
ἐπὶ ζείδωρον ἄρουραν, 6 (Il. 2).
* ἐπὶ θρόνου ἔνθεν ἀνέστη, 5 Od.
* ἐπὶ κλησὶ καθῖζον, 8 Od.
ἐπισφυρίοις ἀραρυίας, 5 Il.
ἐπὶ χθόνα πουλυβότειραν, 9 (Od. 1).
ἐπιχθονίων ἀνθρώπων, 5 (Il. 1).
* ἐποιχομένη κατέπεφνεν, 6 (Od. 1).
* ἔπος φύγεν ἕρκος ὀδόντων, 8 (Il. 2).
* ἐποτρύνει καὶ ἀνώγει, 6 (Od. 1).
ἐρίγδουπος πόσις Ἥρης, 7 (Od. 3).
ἐρυσσάμενος παρὰ μήρου 9 (Il. 2).
* ἐρύσσομεν εἰς ἅλα δῖαν, 5 (Il. 2).
ἐυκνήμιδες ἑταῖροι, 5 Od.
ἐυσταθέος μεγάροιο, 7 (Il. 1).
* ἐχάζετο κῆρ ἀλεείνων, 7 Il.
ἐχέφρων Πηνελόπεια, 6 Od.
θεὰ Θέτις ἀργυρόπεζα, 7 Il.
θεοὶ οἱ Ὄλυμπον ἔχουσιν, 6 (Od. 3).
θεοῖς αἰειγενέτῃσιν, 5 (Od. 2).

θεοῖς ἐπιείκελ' Ἀχιλλεῦ, 6 (Od. 1).
θεὸς ὡς τίετο δήμῳ, 6 (Od. 1).
θεῶν αἰειγενετάων, 7 (Od. 2).
* θεῶν ἐν γούνασι κεῖται, 5 (Il. 2).
θοῷ ἀτάλαντος Ἄρηι, 7 Il.
θρασειάων ἀπὸ χειρῶν, 7 (Od. 1).
θυγατρῶν εἶδος ἀρίστη, 5 Il.
θύρας πυκινῶς ἀραρυίας, 5 (Il. 1).
ἰδυίῃσιν πραπίδεσσιν, 5 (Od. 1).
ἰδὼν εἰς οὐρανὸν εὐρύν, 5 Il.
ἰδὼν ἐς πλησίον ἄλλον, 9 (Il. 3).
καὶ ἀθάνατοι θεοὶ ἄλλοι, 7 (Il. 1).
καὶ ἀμφ' ὀβελοῖσιν ἔπειρεν, 6 (Od. 3).
καὶ ἔγχεσιν ἀμφιγύοισιν, 8 (Od. 2).
καὶ εἰλίποδας ἕλικας βοῦς, 5 (Il. 2).
καὶ εἰν Ἀΐδαο δόμοισιν, 8 (Od. 4).
καὶ ἐσσομένοισι πυθέσθαι, 6 (Il. 2).
καὶ εὐχόμενος ἔπος ηὔδα, 7 Il.
* κακὸν (καλὸν) βάλεν ἠδὲ χιτῶνα, 7 (Il. 1).
καρήνων ἀίξασα, 6 (Od. 2).
* κατήλυθον ἠδὲ θάλασσαν, 7 Od.
κατὰ κλισμούς τε θρόνους τε, 8 Od.
κατὰ κρατεραὶς ὑσμίνας, 6 Il.
κατ' ἀσπίδα παντόσ' ἐίσην, 9 Il.
κατὰ θνήτων ἀνθρώπων, 7 (Il. 1).
κατακτάμεναι μενεαίνων, 6 Il.
* κατεκλάσθη φίλον ἦτορ, 7 Od.
Κρόνου παῖς ἀγκυλομήτεω, 8 (Od. 1).
* λόφος καθ' ὕπερθεν ἔνευεν, 6 (Od. 2).
Λυκάονος ἀγλαὸς υἱός, 7 Il.
* μάλ' ἀτρεκέως ἀγορεύσω, 9 Od.
μάχης ἠδὲ πτολέμοιο, 6 Il.
μελαινάων ἐπὶ (ἀπὸ) νηῶν, 7 (Od. 1).
Μελάνθιος αἰπόλος αἰγῶν, 9 Od.
μένος καὶ χεῖρας ἀάπτους, 5 (Od. 1).
* μετ' ἀθανάτοισι θεοῖσιν, 5 (Il. 1).
* μεταλλῆσαι καὶ ἐρέσθαι, 5 Od.
μετὰ Τρῶας καὶ Ἀχαιούς, 6 Il.
νεὸς κυανοπρῴροιο, 9 (Il. 1).
νεῶν ἄπο καὶ κλισιάων, 7 Il.
ὀδυρόμενος καὶ ἀχεύων, 5 (Il. 2).
Ὀδυσσῆος φίλος υἱός, 9 Od.
Ὀιλῆος ταχὺς Αἴας (υἱός) 9 Il.
Ὀλύμπια δώματ' ἔχοντες, 9 (Od. 4).
ὁμηγερέες τε γένοντο, 7 (Il. 2).
ὁμοιίοο πτολέμοιο, 8 (Od. 2).
ὀνειδείοις ἐπέεσσιν, 5 (Od. 1).
* ὄρος πόλει ἀμφικαλύψῃ 5 Od.
περίκλυτος ἀμφιγυήεις, 9 (Od. 3).
περίφρονι Πηνελοπείῃ, 6 Od.
* περὶ χροΐ εἵματα ἕστο, 5 (Il. 1).
* πεσὼν ἕλε γαῖαν ἀγοστῷ, 5 Il.
πόδας καὶ χεῖρας ὕπερθεν, 9 (Od. 3).
ποδήνεμος ὠκέα Ἶρις, 9 Il.
πολυφλοίσβοιο θαλάσσης, 8 (Od. 2).
σάκος μέγα τε στιβαρόν τε, 5 Il.
σέβας μ' ἔχει εἰσορόωντα, 5 Od.
συβώτης ὄρχαμος ἀνδρῶν, 5 Od.
σὺν ἵπποισιν καὶ ὄχεσφιν, 5 Il.
σὺν τεύχεσι θωρηχθέντες, 6 Il.
τελεσφόρον εἰς ἐνιαυτόν, 5 (Il. 1).
τελεύτησέν τε τὸν ὅρκον, 6 (Il. 1).
τεληέσσας ἑκατόμβας, 8 (Il. 3).
* τίθει· ὁ δὲ δέξατο χαίρων, 5 (Od. 1).
τὸ γὰρ γέρας ἐστὶ θανόντων, 5 (Od. 2).
* ὕδωρ ἐπὶ χεῖρας ἔχευεν, 5 (Il. 2).
ὑπερμένεῖ Κρονίωνι, 6 Il.
* ὑπέσχετο καὶ κατένευσεν, 8 (Od. 3).
ὑφ' ἅρμασιν ὠκέας ἵππους, 5 (Od. 1).
φίλη τρόφος Εὐρύκλεια, 9 Od.
φιλομμειδὴς Ἀφροδίτη, 6 (Od. 1).
φίλον τετιημένος ἦτορ, 7 (Il. 1).
* φίλος διελέξατο θυμός, 5 Il.
φίλων καὶ πατρίδος αἴης, 6 (Il. 2).
χαριζομένη παρεόντων, 6 Od.
* χολώσατο κηρόθι μᾶλλον, 5 (Il. 1).

C. — *Masculine Tags repeated more than* 9 *times.*

Ἀγαμέμνονα ποιμένα λαῶν, 14 (Od. 3).
Ἀγαμέμνονος Ἀτρείδαο, 13 (Od. 4).
* ἀγορήσατο καὶ μετέειπεν, 18 (Od. 9).
* ἀπαμείβετο φώνησέν τε, 11 (Il. 1).
ἀράβησε δὲ τεύχε' ἐπ' αὐτῷ, 10 (Od. 1).
* ἔπεα πτερόεντ' ἀγόρευον, 10 (Od. 4).
* ἔπεα πτερόεντα προσηύδα, 100 (Od. 49).
ἐπεὶ ἦ πολὺ φέρτερός ἐστιν, 13 (Od. 5).
εὐρὺ κρείων Ἀγαμέμνων, 12 (Od. 1).
ἡγήτορες ἠδὲ μέδοντες, 23 (Od. 9).
καί μιν πρὸς μῦθον ἔειπεν, 14 (Il. 6).
κεκορυθμένος αἴθοπι χαλκῷ, 10 (Od. 1).
κοῦραι Διὸς αἰγιόχοιο, 15 (Il. 5).
* λοῦσαν καὶ χρῖσαν ἐλαίῳ, 10 (Il. 1).

* μάλα μὲν κλύον ἠδὲ πίθοντο, 11 (Od. 4).
Μενελάου κυδαλίμοιο, 14 (Il. 7).
* πεπνυμένος ἀντίον ηὔδα, 48 (Il. 2).
* προΐει δολιχόσκιον ἔγχος, 13 (Od. 2).
* προσέφη κορυθαίολος Ἕκτωρ, 10 Il.
* προσέφη κρατερὸς Διομήδης, 10 Il.
* προσέφη νεφεληγερέτα Ζεύς, 22 (Od. 6).
* προσέφη ξάνθος Μενέλαος, 12 (Il. 4).
* προσέφη πόδας ὠκὺς Ἀχιλλεύς, 24 Il.
* προσέφη πολύμητις Ὀδυσσεύς, 68 (Il. 8).
* προσέφης Εὔμαιε συβῶτα, 13 Od.
τὼ δ' οὐκ ἀέκοντε πετέσθην, 10 (Od. 3).
τὸν δὲ σκότος ὄσσε κάλυψεν, 11 Il.

D. — *Masculine Tags repeated* 5–9 *times.*

ἕλοχοι καὶ νήπια τέκνα, 5 Il.
ἀνά τε πρυμνήσια λῦσαι, 5 Od.
βροτολοίγῳ ἶσος Ἄρηι, 5 (Od. 1).
γαιήοχος ἐννοσίγαιος, 8 (Od. 1).
Δαναοὶ θεράποντες Ἄρηος, 5 Il.
διὰ δὲ στήθεσφιν ἔλασσεν, 5 (Od. 1).
Διομήδεος ἱπποδάμοιο, 8 (Od. 1).
ἑκατηβόλου Ἀπόλλωνος, 5 (Od. 1).
Ἑλένη Διὸς ἐκγεγαυῖα, 5 (Il. 2).
ἐπιείκελον ἀθανάτοισιν, 6 (Od. 3).
ἡμὲν δέμας ἠδὲ καὶ αὐδήν, 5 Od.
θαλερὸν κατὰ δάκρυ χέοντες, 8 (Il. 1).
θάνατος καὶ μοῖρα κραταίη, 6 Il.
θεόφιν μήστωρ ἀτάλαντος, 5 (Od. 2).
Θηβαίου Τειρεσίαο, 5 Od.
ἱερὴ ἷς Τηλεμάχοιο, 7 Od.
ἱερὸν μένος Ἀλκινόοιο (Ἀντινόοιο), 8 Od.
καὶ Νέστορος ἀγλαὸς υἱός, 5 (Il. 1).
καὶ ῥήγεα σιγαλόεντα, 6 Od.
καὶ Δάρδανοι ἀγχιμαχηταί, 5 Il.
κλισίας καὶ νῆας Ἀχαιῶν, 5 Il.
* κραδίη θυμός τε κελεύει, 7 (Il. 1).
κραδίη καὶ θυμὸς ἀγήνωρ, 6 (Od. 2).
* Κρητῶν ἀγὸς ἀντίον ηὔδα, 6 Il.
* κυνέην εὔτυκτον ἔθηκεν, 5 (Od. 2).
μάκαρες θεοὶ αἰὲν ἐόντες, 5 (Il. 1).
μεγαλήτορος Ἀλκινόοιο, 7 Od.
μνήσασθε δὲ θουρίδος ἀλκῆς, 9 (Od. 1).
νεκύων κατατεθνηώτων, 8 (Il. 3).
* ξεστὴν ἐτάνυσσε τράπεζαν, 6 Od.
Πηληιάδεω Ἀχιλῆος, 8 (Od. 2).
πόθι τοι πόλις ἠδὲ τοκῆες, 6 Od.
ποῖον τὸν μῦθον ἔειπες, 7 Il.
πολεμίζειν ἠδὲ μάχεσθαι, 9 Il.
* πολιὴν ἅλα τύπτον ἐρετμοῖς, 6 Od.
πρὶν πατρίδα γαῖαν ἱκέσθαι, 5 Od.
* προσέφη γλαυκῶπις Ἀθήνη, 6 (Il. 1).
* προσέφη κρείων Ἀγαμέμνων, 8 Il.
* προσεφώνεεν ἐγγὺς ἐόντα, 6 (Od. 2).
πρὸς Ἴλιον ἠνεμόεσσαν, 6 Il.
* προχόῳ ἐπέχευε φέρουσα, 6 Od.
σκιόωντο δὲ πᾶσαι ἀγυιαί, 7 Od.
* ταμίη παρέθηκε φέρουσα, 7 Od.
ὑπὲρ ἀργυρέοιο λέβητος, 6 Od.
ὑπὸ δὲ θρῆνυς ποσὶν ἦεν, 5 Il.

SUMMARY.

A.	58	tags	occurring	1090	times;	in Iliad	606,	in Odyssey	484.
B.	139	"	"	842	"	"	462,	"	380.
C.	27	"	"	539	"	"	267,	"	272.
D.	45	"	"	279	"	"	130,	"	149.
AB.	197	"	"	1932	"	"	1068,	"	864.
CD.	72	"	"	818	"	"	397,	"	421.

But some of these clauses are not truly independent; evidently it is unfair to bring into the same category *ἀκόντισε δουρὶ φαεινῷ*, which is needed to complete a grammatical sentence, and *βοῶπις πότνια Ἥρη*, which may be used as a

mere tag in apposition with the subject of the sentence. If the clauses marked in the lists by an asterisk are subtracted, we have the following

REVISED SUMMARY.

A.	46	tags	occurring	856	times;	in Iliad	517,	in Odyssey	339.
B.	133	"	"	619	"	"	354,	"	265.
C.	12	"	"	159	"	"	107,	"	52.
D.	35	"	"	217	"	"	104,	"	113.
AB.	179	"	"	1475	"	"	871,	"	604.
CD.	47	"	"	376	"	"	211,	"	165.

This table shows that more than 79 per cent of oft repeated Homeric clauses fitted to follow a caesura of the third foot are adapted to follow the feminine caesura, while less than 21 per cent are adapted to follow the penthemimeral caesura. It shows moreover that these tags are proportionately more frequent in the Iliad than in the Odyssey.

We have seen (1) that the feminine caesura in the third foot is more frequent than the masculine caesura in that foot; (2) that this predominance is not due to the material of the language, but to the preference of the poet; and (3) that the clauses which are most likely to have come to Homer from earlier generations of bards are prevailingly suited to the feminine caesura. Hence this pause seems to have been the earliest and the most approved pause of the verse. Thus the presumption is not in favor of the penthemimeral caesura as in Vergil, but is on the side of the feminine caesura, — a principle which is important for textual criticism.

III. — *The Appeal to the Sense of Sight in Greek Tragedy.*

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EVERYBODY who has even a superficial acquaintance with Greek Tragedy knows how important is the *rôle* of messenger, and how into this part are relegated suicides, murders, and battles, with what might seem to a modern playwright a reckless prodigality in giving up dramatic situations.

When we reflect that not a single case occurs in extant Greek tragedy — that field of blood — in which one person kills another on the stage, it does not seem strange that it should be laid down by some as a canon of Greek taste, that bloody deeds were too horrible for the eye. The less æsthetic Romans could endure Seneca's Medea killing her children *coram populo.*

H. Köchly, in a lecture on Antigone, uses the following language: "Die That selbst, insofern sie körperlich vollbracht wird, entbehrt eigentlich der geistigen Theilnahme, des humanen Interesses: nur die Motive einerseits und die Resultate der That andererseits sind es, die dem Dramatiken zu expliciren obliegen, und das konnte gerade durch anschauliche Schilderung besser erreicht werden als durch die sinnliche Execution selbst. . . . An Stelle der Botenerzählungen, also, die Vorgänge selbst auf der alten Bühne sehen zu wollen, würde ungefähr ebenso sein, als wenn ein an seine blutigen Gladiatorspiele und Thierkämpfe gewöhnter Römer von unserer Bühne verlangen wollte die Schauspieler sollten sich wirklich tödten."[1]

Here the idea is not that the bloody deed is too horrible, but vivid description (anschauliche Schilderung) lays hold of the mind better, — a marked contrast to Horace's judgment.

[1] Copied from J. G. Rothmann, Beiträge zur Einführung in das Verständniss der griechischen Tragödie (Leipzig, 1863), page 9, where it is quoted with approval.

"*Segnius* irritant animos demissa per aurem."
De Arte Poetica, 180.

It is only a slightly different way of putting the assertion that the Greeks preferred, and rightly preferred, vivid description to sensuous representation. Perhaps it would not be too venturesome to assume that this is the prevailing view of the matter.

One thing, however, which makes all this talk of the preference of narrative to representation in the Greek drama seem strange at the very outset is, that it is contrary to the current Greek definitions of the drama. Plato says, ἡ μὲν (the drama) διὰ μιμήσεως ὅλη ἐστίν, while epic poetry proceeds δι' ἀπαγγελίας (Rep. iii. 394 c). Aristotle defines tragedy as something that proceeds by action and not by narration, δρώντων καὶ οὐ δι' ἀπαγγελίας (Poetics, vi. 2). Moreover, to name the drama from δράω (to act), when by a law of its being it avoided the important acts on which everything hinged, seems a thing of which the Greeks would hardly have been guilty. We should rather be led by the name and the definition to expect to see the dramatic poet attempting to appeal to the eye, pushing out boldly to the limits of his art in that direction, — not perhaps converting the drama into a pantomime, but certainly not removing from the stage an important action unless compelled to do so by a law from which there was no appeal. Something of this sort we actually find in Greek tragedy.

But let us first turn to Aristotle, who had before him a mass of plays, probably ten or twenty times as many as now survive, from which he drew certain rules of dramatic usage. In his Poetics (xi. 6) he speaks of πάθος as just as much a legitimate element in the plot of a tragedy as περιπέτεια and ἀναγνώρισις, and then defines πάθος as including death on the stage (οἱ ἐν τῷ φανερῷ θάνατοι), excessive pain (like that of Philoktetes, perhaps), and wounds. He also mentions (xviii. 2) the παθητική as one of the four kinds of tragedy, giving as examples of it the Aiases and Ixions. Sophokles's Aias commits suicide on the stage, and Euripides's Ixion, Plutarch (De Aud. Poet. 19 e) tells us, was punished on the stage. From these passages it does not appear that Aristotle was

aware of any rule excluding scenes of bloodshed from the stage.

There are, however, two other passages in the Poetics which at least *appear* to contradict these two passages just quoted. Taken in their most obvious sense they seem to repudiate Aristotle's own definition of tragedy, which is enough to make us try to dodge the most obvious sense. Both passages turn on the meaning of the word ὄψις, which one would naturally like to translate in a general sense (sight). This is clearly the meaning in Sophokles O. T. 1238, ἡ γὰρ ὄψις οὐ πάρα. The first passage (vi. 19) translated in this way reads, "Sight is attractive but very inartistic, and least germane of all things to the poetic art; for the power of a tragedy is apart from representation and actors." If this does not reprove the presentation of the important events of the tragedy it is hard to get any very satisfactory meaning out of it. The next clause, "The art of the stage-furnisher (σκευοποιός) has more to do with the effect of sight than that of the poet," may have suggested the rather venturesome dodge of translating ὄψις, "decorations of the stage." (So Pye. Buckley has "scenic decorations.") Susemihl's "das Theatralische" is safer. That would fit the first clause of the passage better. Even a duel brought into the theatre would depend *somewhat* on the stage-furnisher. It would at least require weapons, with which the narrative of the duel could dispense.

The second passage (xiv. 1) reads, "The impression of fear and pity may be produced by sight (ἐκ τῆς ὄψεως), but may also be produced by the plot itself, which is preferable and characteristic of a better poet; for the plot ought to be so constructed that even without the sight (ἄνευ τοῦ ὁρᾶν) one who hears of the events as occurring shall shudder and feel pity at them. . . . To compass this result through the sight (διὰ τῆς ὄψεως) is less in accord with art." This passage can yield but one meaning except under torture. It makes a contrast between representation and narrative in favor of the latter. Even Pye feels that "decorations of the stage" would be absurd, and translates ὄψις as "representation." He might again have fallen back on the succeeding clause, καὶ χορη-

γίας δεόμενον ἐστίν, and still kept "decorations of the stage." Though this would have been consistent and bold, he would have found few followers. Susemihl's judgment on the word *ὄψις*, which is not likely to be much disputed, is, "Die eigentliche leibhaftige Voraugenstellung ist ja doch erst die theatralische — *ὄψις*" (Rhein. Mus. XXII. 233).

These two passages, then, would seem to prove that whatever may have been the prevailing practice, Aristotle's judgment was that an appeal to the sight was not in keeping with tragic art. As for the contradiction already spoken of, we must get along with that as best we can.

There is, however, another passage of the Poetics which seriously complicates matters, and tends to drive us away from this most obvious meaning of *ὄψις*. In vi. 7, 8, are twice enumerated the six elements of tragedy, and *ὄψις* is put down as coördinate with *μύθος*, the plot; while in xi. 6, *πάθος*, which includes death on the stage, etc., is a *part* of the plot. The inference from this would be, provided Aristotle is not playing fast and loose with words, that *ὄψις* could have no reference to deaths on the stage, and that we are wrong in finding in vi. 19 and xiv. 1 any judgment on the subject of representation *vs.* narration. The words *σκευοποιός* and *χορηγία* in those passages may then be tortured to support the idea that *ὄψις* refers everywhere to the larger arrangements of the *mise en scène*, the proper element of the *σκευοποιός*. Thus the passages might be taken as a reproof to Aeschylos (Gruppe, Ariadne, p. 763) for his gigantic stage apparatus, of which we have a specimen in Prometheus Bound, or possibly for the introduction of such terrible forms as the Eumenides.

Aristotle's adducing (Poetics, xiv. 1) Oedipus Tyrannos as an instance of a tragedy the effect of which does not depend on *ὄψις* would seem peculiarly unfortunate if *ὄψις* must be understood to be "die leibhaftige Voraugenstellung." To be sure, the bare story *might*, as Aristotle says, produce its effect without the appeal to the sight; but Sophokles did not choose to try that method. The presenting of Oedipus on the stage when he has just struck out his own eyes makes the strongest appeal to the sight. It is called in line 1296 "a

sight to touch with pity even one who hated him." Still, it seems better to accuse Aristotle of using a faulty illustration than to suppose even here that ὄψις means stage apparatus, which would lead to the ridiculous inference that Aristotle is praising Sophokles for refraining from introducing the Sphinx, or something of the sort.

Though Aristotle's verdict is not quite clear, yet, making due allowance for the unsatisfactory condition in which his Poetics have come down to us, it might be said to admit the fact that the Greek tragic writers did make frequent use of the appeal to sight at the critical points of their tragedies, and at the same time to censure the constructing of a plot so that it would need to be helped out by such an appeal. The probable gap at the close of chapter xi. is particularly unfortunate, for just there he began to tell something about deaths on the stage. We should at least have been glad to know whether the scantiness of such events in the extant Greek tragedies is a mere accident of survival, or whether in the whole broad field as it lay before Aristotle the deaths of Aias and Alkestis were just as exceptional as they are to us.

If any one should turn to the surviving tragedies and run through their catastrophes, expecting to find therein proof of a supposed rule that they avoid the producing of their proper effect by an appeal to the sight, he would soon be astonished to see how little countenance *they* give to the existence of any such rule. Suppose him to begin with the Bacchai of Euripides. Who ever saw a more skilful attempt to present to the eye an awful spectacle? Everything leads up to the supreme moment when Agave, with glaring eyes, and frenzy in every movement, comes upon the stage bearing in her hands the bloody head of her son. Had the rending in pieces of Pentheus been capable of representation on the stage, it could hardly have produced the horror of *this* scene. The bloody heads set up on the Karlsbrücke in Prague after the battle on the Weisser Berg made a more awful scene than the actual swing of the headsman's axe. If "anschauliche Schilderung" were the best means of taking hold of the soul, Euripides made a mistake in not introducing a messenger to tell how

Agave marched through the streets of Thebes with the bloody head. Lessing, in his Hamburgische Dramaturgie, is bold enough to bet that he could improve every drama of Corneille, without being much of a poet either. But who would be bold enough to venture to make the Bacchai more effective by an alteration of this character?

A survey of the extant tragedies yields something like the following.

AESCHYLOS.

AGAMEMNON. — Just after Agamemnon's great cry behind the scenes, 1343 and 1345, the ἐκκύκλημα[1] discloses at 1372 the dead bodies of Agamemnon and Kassandra, with Klytemnestra standing by. So she says, 1379,

ἕστηκα δ' ἔνθ' ἔπαισ' ἐπ' ἐξειργασμένοις.

The savagery of the whole speech is largely dependent for its effect on the dead bodies at her feet.

CHOEPHOROI. — After Aegisthos's death groans have been heard behind the stage and Klytemnestra has been led away from the spectators' sight for slaughter, two bodies are rolled out (972), Orestes shows the blood-stained garment (981) in which Agamemnon had been entangled and slain, and makes as much use of it for the pathos of his speech as Antony does of the body of Caesar.

EUMENIDES. — To say nothing of the terrible appearance of the ghost of Klytemnestra, the appearance of the Furies, whether on the stage or in the orchestra, must have been terrible. If the tradition of women miscarrying at the sight be only a tradition, it gives, at any rate, an ancient verdict as to the probable results of such an appeal to the sight.

SEVEN AGAINST THEBES. — The dead bodies of Eteokles and Polyneikes are brought in (τόνδε, 1013) to give added pathos to the lament of the sisters and the chorus.

PROMETHEUS. — At the opening of the drama the wedge is driven right through what purports to be the body of Prometheus; at the close there is a convulsion of nature, in which the scene is broken up and Prometheus sinks beneath the earth. Prometheus is somewhat spectacular and the Eumenides sensational.

[1] Wherever the ἐκκύκλημα is used to roll out dead bodies, we certainly have an instance of an appeal to sight.

PERSIANS. — The proper catastrophe of the Persians is, of course, contained in the narrative of the battle; but even here the ghost of Dareios must have been an impressive spectacle. Xerxes also, exhibiting royalty in rags, appeals to the eye for pity.

SUPPLIANTS. — In the Suppliants a peculiar case of violence takes place on the stage. The herald threatens (884) to drag the chorus off by the hair and to tear their clothes (902). At 905 he seems to put the threat in execution when he says,

> ἕλξειν ἔοιχ' ὑμᾶς ἀποσπάσας κόμης,
> ἐπεὶ οὐκ ἀκούετ' ὀξὺ τῶν ἐμῶν λόγων.

At any rate, they exclaim,

> διωλόμεσθ'· ἔκλπτ', ἄναξ, πάσχομεν,

implying that the violence was already begun.[1]

SOPHOKLES.

OEDIPUS TYRANNOS. — At 1295 the doors of the palace are thrown open, while the messenger remarks,

> "and thou 'lt see
> A sight to touch e'en hatred's self with pity."

And so the chorus feel, for they burst out,

> "Oh, fearful sight for men to look upon."

The further appearance of the blinded Oedipus is pitiful indeed.

ANTIGONE. — At 1260 Creon comes in bearing the body of his son. Eurydike's body is exposed at 1295. These two dead bodies are more stirring than the actual contents of Creon's pathetic speech.

ELEKTRA. — After the death-cry of Klytemnestra behind the scenes, Orestes and Pylades come forth with hands dripping with blood (1422); then the dead body is revealed. There are four steps to the culmination: (1) the cry; (2) the bloody hands; (3) the dead body; (4) Aegisthos unrolls the winding-sheet and gazes with horror on his paramour. If sight is not skilfully appealed to here, who can suggest any improvement?

Yet, as an example of the usual restraint, Aegisthos is not forthwith killed *coram populo*, but led away to slaughter behind the scenes.

[1] This violence committed by an actor upon the chorus would accord with the view of Dr. Höpken, expressed in a treatise published last year in Bonn, and reviewed in Am. Jour. of Philology (No. 18), that the stage and the orchestra were all on the same level.

TRACHINIAI. — Herakles appears (1031) suffering fierce bodily pain, calling out "Pallas! Pallas!" and begging Hyllos to draw a sword and smite off his head; and his long speech must have been accompanied with all the outward signs of pain, or it would have seemed ridiculous.

AIAS. — The interior of the tent is shown (346), with Aias in his despair, at returning reason, surrounded by the slaughtered animals, — a powerful scene.

Aias falls on his sword (865).

Tecmessa falls on his body (893).

The chorus uncover the body (1002).

PHILOKTETES. — The wild looks of Philoktetes are mentioned (226). His whole appearance throughout the piece must have been that of a man suffering intense bodily pain. The poet must have depended on this *appearance* to justify the inarticulate cries that largely make the contents of a whole episode.

Thus the only extant drama of Sophokles that makes no especial appeal to the sight is Oedipus at Kolonos. That makes no more appeal of that sort than Goethe's Torquato Tasso. Aristotle might well have cited it as an example of a tragedy so constructed that its power should be felt by merely reading it. He could hardly have appealed to any of the extant plays of Aeschylos for such an example.

EURIPIDES.

ION, HELENA, HERAKLEIDAI, IPH. AUL., and IPH. TAUR. avoid all appeal to sight in producing the catastrophe.

BACCHAI. — This striking case has already been discussed (see above, p. 45

ALKESTIS. — Alkestis dies on the stage (390). Her reappearance at the end of the piece, veiled, was an impressive spectacle.

HIPPOLYTOS. — Under spasms of pain (1350 ff.), with mangled body, Hippolytos at last expires on the stage.

MEDEIA. — After the children's death-cries behind the scenes, their dead bodies are seen on a chariot.

ORESTES. — Orestes is shown raving on his couch.

PHOINISSAI. — After much restraint in showing, just at the end there is a pathetic scene where blind Oedipus puts his hands over the bodies of Jocasta and his two sons.

HEKUBA. — Blind, raging Polymestor (1035 ff.), with the dead body of his son near, makes a similar picture.

ELECTRA. — After the death-cry two bodies are exposed (1177).

TROADES. — Astyanax is brought in on a shield (1118), and the sight adds pathos to Hecuba's speech (1156 ff.) and to the chorus's bitter wail (1216 ff.).

The piece ends in a conflagration and crash like Prometheus Bound. (1318, *τὰν φόνιον ἔχετε φλόγα*, said of the temples. 1325, *Περγάμον γε κτύπον*. 1326, *ἔνοσις . . . ἔνοσις*.)

SUPPLIANTS. — Evadne is seen on a crag (987); takes the fatal leap (1071).

The ashes of the dead heroes are borne by the children (1123 ff.), while they with their mothers chant the dirge.

But before this the soldiers of Theseus bring the bodies of the slain heroes all the way from Thebes to Eleusis, that they may be exposed (811), and impart pathos to the funeral speech of Adrastos (861 ff.).

Cf. *ὅδε*, 861.

ANDROMACHE. — In a similar way the body of Neoptolemos, who was killed in Delphi, is "lugged in" all the way to Thessaly, to be exposed for effect (1166 ff.).

RHESOS. — The effect of the pathetic lament of the Muse over her dead son is enhanced by the fact that she holds the body in her arms (887 ff.).

HERAKLES. — The terrible effect of madness comes over Herakles on the stage (870).

He falls asleep among the dead bodies of his wife and children, who have just been slain by him (1030 ff.).

He wakes and notices the bodies of his wife and children, and learns that he has killed them (1189 ff.).

This review, I think, fairly shows that the general rule excluding scenes of violence from the stage cannot have resulted from any fear on the part of the poets of harrowing up the souls of the spectators by too terrible scenes. An audience which could endure the sight of the Furies, of Philoktetes with his spasms of pain and awful howlings, and of Agave with the bloody head of her son, might surely have endured the sight of a casual murder.

There is one principle which will explain both the apparent restraint and the apparent striving after effect. Greek acting went as far as the *illusion* could be made perfect, and then fell back on narrative. It is in the intuitive perception of the

limits of the actor's art that the ever fine sensibility of the Greek shows itself.

Whoever has seen Shakespeare's battles on the stage knows how strong is his tendency to laugh at them even when he knows that that is not what the poet expected of him. Shakespeare's apology for his temerity in Henry the Fifth does credit to his judgment.

> "And so our scene must to the battle fly;
> When — oh for pity! — we shall much disgrace
> With four or five most vile and ragged foils,
> Right ill dispos'd, in brawl *ridiculous*,
> The name of Agincourt. Yet sit and see,
> Minding true things by what their mockeries be."

Aeschylos shows *better* sense in not attempting to represent Salamis at all.

Whoever has seen Schiller's "Wilhelm Tell," and studied the faces of the audience during those very long minutes through which Gessler's horse is held by an attendant while Tell reads him a lecture before sending the arrow through his breast, and has then joined, in spite of himself, in the laughter that always accompanies the final tumble of Gessler, has felt that the modern poet has attempted too much.

Is it not something of this sort that Horace has in mind when he speaks of things "intus Digna geri" (De Arte Poetica, 182)? Euripides seems to have felt with finer instinct that the attempt to represent the tearing in pieces of Pentheus would only make the spectators laugh, in spite of all the actors could do to make it look real and awful. Alkestis could die with decorum, and the illusion could be made tolerably complete.[1]

Euripides's audience was probably somewhat more keenly sensitive to the ridiculous than Schiller's; but how closely

[1] K. O. Müller has a peculiar criterion for the admission of death, etc., on the stage. He says, "It is only on account of the peculiar psychological state of Prometheus when bound, and of Ajax at the time of his suicide, that the outward acts are brought upon the stage" (Gesch. d. griech. Lit., II. 58).

Peculiar psychological state might account for a murder or suicide on the stage, in any other play as well as in these two. Orestes seems in nearly every one of his appearances ready for suicide, as far as his psychological state is concerned.

the pathetic always verges on the ridiculous many aspiring young dramatists have discovered to their cost. Friedrich Schlegel's tragedy Alarcos was received in Weimar with bursts of laughter. A dramatist would be likely to remember such a lesson a lifetime.

The comparison between the Greek theatre and the modern church breaks down at one point. Reverence for the god Dionysos was not so all-controlling that the audience was not ready to make the most of a good joke. The experience of Aeschines, when he was so pelted with fruit in Kollytos, for acting Oenomaos badly, that he might, according to Demosthenes (XVIII. 262), have set up a small fruit-stall on what he got, cannot be pressed as an example of what happened in the great theatre of Dionysos. But Hegelochos's slip in the delivery of Orestes 279, γαλῆν' ὁρῶ, must have caused a good deal of merriment even there in the best days of the theatre. Aristophanes (Frogs, 304) alludes to it in such a way as to show that everybody recognized it as a capital joke.

Aristotle (Poetics, xxiv. 8) alludes to this danger of laughter spoiling all, — a danger which must have been ever present to the mind of the Greek dramatist. After saying that tragedy cannot represent what is absurd, as epic poetry can, he adds, "The pursuit of Hector on the stage would appear laughable (γελοῖα)."

The Greek actor had to contend with one great obstacle in producing illusion in violent scenes, which does not exist for the modern actor. The former was not only stuffed out with pillows behind and before, like our traditional stage Falstaff, but had a mask, which, Lucian (De Salt. ii. 7) says, made him look as if he were going to swallow his audience, and, worse than all, he was practically set up on stilts, and so was in imminent danger of falling. If such a fall occurred, the result was pretty sure to be, barring any worse calamity, that poet and choregos might say good-bye to their prize. Not only have we the specific case of Aeschines' disastrous fall narrated in the anonymous life of Aeschines, but from Lucian (Gallus, 26) it appears that such cases were common, even with the gentle movements of the Greek stage. He says, "Then whenever

they [the rich] fall, they appear exactly like tragic actors, many of whom we can see being for a time Cecropses forsooth or Sisyphoses or Telephoses, with diadems on their heads, and ivory-handled swords and waving hair and gold-broidered cloaks. But if, as is often the case (πολλὰ γίγνεται), one of them steps into a hollow in the middle of the stage and falls, he furnishes laughter, of course, to the spectators," etc.

The rest of the passage shows that when a Greek tragic actor fell, he fell like Lucifer. One item is worth quoting: "The mask is smashed, diadem and all, and the actor's real head is bloody."

If Aristotle's ὄψις should be referred to the acting out of scenes of violence, his remark that it required apparatus (χορηγία) would be amply explained. For the pieces of the wrecks resulting might hardly be worth gathering up for use another year; and for the actors it would be practically complying with the Roman demand that they should actually kill themselves. The case of Aias is, all things considered, quite a bold venture. To make a graceful fall in this *rôle* must have made quite a demand upon an actor's powers.[1]

Finally, the judgment of Horace (De Arte Poetica, 179 ff.), which is probably more quoted than any other passage, as echoing the practice of Greeks, is not too stubborn to fall in line with the train of thought that *illusion* is the "be all and the end all" of the actor and poet.

The sense of the familiar passage is about as follows: "An occurrence may be either acted on the stage or narrated after the event. What is transmitted through the ear acts more sluggishly upon the mind than what is presented to the eyes, which one is accustomed to trust. Do not, however, put upon the *stage* what ought to be transacted behind the scenes; and remove many things from sight which an eloquent eye-witness will presently relate. Let not Medea butcher her children

[1] Lessing is too sanguine when in the Laocoön he expresses the confidence that although the modern actor could not have made the physical pain of Philoktetes real, yet Greek actors must have had histrionic powers equal to the task. If the Greek actor did succeed in making that pain real to his audience, he certainly succeeded under conditions which might reasonably discourage the modern actor.

before the audience, nor impious Atreus cook human flesh openly, nor Procne be changed into a bird nor Cadmus into a serpent. Whatever you *present* to me in *this way* I receive with *incredulity* and disgust."

I think this passage is usually understood as relegating *horrors* behind the scenes, as if all the stress were to be put on Medea's butchery and Atreus's unnatural crime, the emphatic words "trucidet" and "nefarius" explaining "intus Digna geri."

Is it not allowable to put the main emphasis on "incredulus?" The acting does not carry me along with it, and I am disgusted. In spite of eyesight, which I usually trust, I remain incredulous. Why make a distinction between the examples given which Horace himself does not make, and say the cases of Medea and Atreus are too *horrible*, the cases of Procne and Cadmus too *improbable*, for representation?

Horace puts all four on the same level, "Quodcunque ostendis mihi sic incredulus odi." Could he have seen Gessler tumbling from his horse, would he not have said "*incredulus* odi"?

IV. — *The Genealogy of Words.*

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All changes in the phonetic form of a word, whether affecting single sounds or consisting in more extensive mutations, fall into two very distinct classes.

To the first class belong changes commonly attributed to the laws governing the muscular actions involved in the utterance of the single word in question, considered by itself; such changes as are not supposed to be in any way due to the influence of other words in the language, and such as could be conceived to go on, were this the only vocable in existence. Here belong, for instance, all the forms of decay and loss, the presumed loss of aspiration in certain Latin mutes, the dropping of certain finals in Greek, the disappearance of the *e* and *o* shade in many Sanskrit short *a*'s, loss of *gh* and palatalization of ȝ in English, shortenings in unaccented syllables, protraction in monosyllables, etc. Cases like *novus*, where *o* has displaced the older *e* (**nevus*), like *woman*, where it has displaced older *i*, the adjacent labials being the assigned cause in both cases, aspiration in Greek imputed to adjacent sigma, liquids, or nasals, cases of assimilation, etc., all belong here.

To the second class belong alterations due to some greater or smaller part of the rest of the vocabulary, whether the disturbing causes be single words or classes of words, capable of definite designation, or whether appeal must be made, as in the following pages, to the general analogies of the language. To this class are, by common consent, assigned popular etymologies and all the various forms of changes due to analogy or to "contamination." In many of these, as in the change of *akern* to *acorn*, there is discerned clear connection with the expression of meaning; the change seems to give a more significant form to the word. In many instances of mutation, however, the meaning is in no way involved. For

instance, Ellis imputes to the influence of the current combination *qu* the change of *pers-u-ade* to *perswade.* I would also put here the confusion of *cl* and *gl*, as in *clory* for *glory*, *claa* for *glad;* of *an* and *and*, *kin* and *can*, *air* and *are*, *think* and *thing*. Formative and grammatical suffixes are sometimes affected in this way, and even permanently altered; thus *-ung* is displaced by *-ing* (through *ng* sonant?); *-ing* displaces older *-and*; *-ing* and *-in* are confused, in vulgar and provincial forms of speech. So also final *-ow*, derived from *-v*, *-h*, or *-g*, often replaces the proper representative of older *-ig*, and may itself interchange with a colorless suffix, commonly spelled -"*er*" (cf. *hâlig*, *hallow*, "*haller*"). Of the nature of these various changes, which most readers will hardly class under "contamination," and of the part played in them by defective hearing (as in *she* from *heô;* often referred, however, to *seô*, but probably a mingling of the two) more will be said hereafter. They are not, however, due to recognized phonetic law.

In the following pages, the changes of the first class will be referred to as "independent phonetic changes," or as changes attributed to strictly mechanical forces. They are generally regarded as the most frequent, the second class as exceptional; my purpose is to bring together some details tending to reverse this relation, and to treat independent phonetic forces as of very secondary importance. The question reduces to this: what is the real genealogy of the form of a word?

The second class, characterized by inorganic alterations of all descriptions, has always been recognized; but the number of words considered as falling under it has quite recently been very greatly increased, for the very simple reason that the present school of etymologists, in the progressive application to details of their cardinal principle of one unvarying line of "independent phonetic change," is compelled to recognize continually more and more cases to which these principles fail to apply. Thus it was, not long ago, the general opinion that Sanskrit *k* might be changed to *c* before any sound (although the action of palatal vowels, organic or parasitic, was not unrecognized). At present, sporadic changes

of this sort are denied; and, in consequence, the frequent instances of palatalization before a sound primitively belonging to the *a* — *o* — *u* series are referred to analogy. There is on the whole progress here, but the general result is the assumption of complete antagonism between the action of analogy and of phonetic law.

I maintain that the sounder principle is to regard the general adoption by the community of all such mutations, as due to causes not mechanical in their nature. Precisely the same force as that which is admitted to have led the *community* to accept *ca-* for older *ka-* (*k* + Indo-European *a*, not a^e or a^o) induced the same community to accept *ci-* for older *ki-*. This view does not exclude, as a possible starting-point, alterations due to independent phonetic action in the mouths of individuals; such, depending, as they do, on unalterable muscular relations, may show themselves sporadically at all times, and in any speech; they are of the class called by biologists "sports." These must, I repeat, be the same at all times; and the problem is to explain the adoption of such individual varieties by the mass of the speakers, since the community, not the individual, makes the received speech.

The problem cannot be solved by strict phonetic law. Muscular actions, and their relations, are unchanging; the phenomena in question vary with particular periods. The solution must be sought in varying causes, such as the alterations in the interrelations of words attending the growth of grammatical systems and of the vocabulary; in the successive conditions of the entire speech these are the most active factors; and through the operation of these the direct phonetic genealogy of the word may, at any period, be completely broken with, just as is confessedly the case with the genealogy of its meanings. From this standpoint, we may confidently assume that there was perhaps no period in the history of the Sanskrit when *ka- ca- ki- ci-* were not coexistent.

The treatment of change of form as if it were due to phonetic law, operating independently of the remainder of the vocabulary, has not only failed to harmonize all the changes, but has left certain questions involved in the deepest mystery.

I do not mean that this or that phenomenon remains unexplained, for this accusation may be brought against any hypothesis, but that it removes the phenomena in question from all known analogies.

It has never explained national peculiarities, the different directions taken by several languages derived from one and the same form of speech. Why should the treatment of intervocalic *i* in Sanskrit vary so widely from its treatment in Greek?

It has never explained the temporary duration of certain laws. Why should a palatal inorganic sound, as in *k'ind, g'arden* have been considered unavoidable in Walker's time? At the beginning of the eighteenth century, *w* suddenly begins to alter a following *a*, up to that time kept pure, so that *water* (with Italian *a*) then received its present sound. At one period *iu* becomes *ü*, at another *ü* resolves again into *iu* (Ellis). Ellis says, "It is a remarkable fact that *i, u* should become *ai, au* by internal modification, and that the *e, o*, constantly developed from these diphthongs, should show a tendency to return to them." The fact is, indeed, remarkable, and it will be seen at once that such processes do not admit of any explanation based upon economy of muscular energy.

As to particular phenomena, what has been the result of its application to the ablaut? An assumption of double or triple roots, which is simply another method of pronouncing the question insoluble. Witness, also, the extraordinary hypothesis of De Saussure, which shows such marvellous ingenuity in attempting to bring together absolutely irreconcilable systems of vocalization under one formula of genetic production. In treating the phenomena of palatalization and labialization, it draws an unsatisfactory line of demarcation between the general process and such sporadic results as the replacement of velar *k* by *π*, which is incapable of explanation through any strictly mechanical means. Neither *κF* nor *k*ᵘ can become *π* except by some irregular *substitution.* It is indeed quite possible that our comprehension of the historical progress of any change may remain incomplete, but the main movement should not be unnecessarily separated from

sporadic phenomena; above all, when the latter present themselves in great numbers. We should not, for instance, separate the general process of the rotation of the mutes from the various classes of irregularities. If an "irregular" Modern High German initial mute is due to the influence of other words, then the "regular" Old High German initial should be supposed to be due to the same species of force, until the contrary is shown to be the case. Yet, as the matter stands, the present initial, when "irregular," is attributed to analogy, the older "regular" initial to some undiscovered cause of an altogether different nature. The truth is that, in the modern case, we have the full evidence of the actual varying practice of living speech, instead of a few MSS. from particular individuals, or as in the oldest document of the first rotation, a fragment of one MS. from one hand only.

There is another question demanding an answer, and it is worth while to attempt to state it in as concrete a manner as possible.

An individual, A, during his youth, reads

> "Where thou, great Anna, whom three realms obey,
> Dost sometimes counsel take, and sometimes tea" [rhyme].

But another, B, in the next generation, at the close of his life, finds the rhyme imperfect. He reads

> "Where thou, great Anna, whom three realms obey,
> Dost sometimes counsel take, and sometimes tea" [present sound].

Now was this, which I shall take as a type of all mutations (since the word "tea," though of foreign origin, once introduced becomes perfectly naturalized), the result of an unconsciously progressing mutation in the mouths of one (or partly in each) of these two individuals? This must have been the case, if changes in sounds are due to independent phonetic forces. But did any one ever detect any change actually progressing in this manner? I am aware that I have altered my pronunciation of certain words, but I am not aware that the change in any one detail has been due to decay or to assimilation or to any force akin to these. I was informed, for instance,

after a long period of erroneous pronunciation, that the *t* in *often* is silent; since then my practice, as that of others, has varied. In general, one sound once learned is as easy as another (although this assertion will certainly not meet general assent); at any rate, change does not proceed by degrees in the mouths of the individual speakers; it is made when the word is learned; and if a sound once learned is afterwards altered, this is due in the majority of speakers to imitation of some new model. Ellis partly follows this line of argument in the first volume of "Early English Pronunciation," although he does not afterwards apply it consistently to details. The special task that he had imposed upon himself was, indeed, too great to permit him to generalize results.

Absolutely the only case in which it would seem necessary to resort to the hypothesis of "independent phonetic change" is that of the production of altogether new sounds. But these, when measured by the physiological alphabet, taken in connection with all the varieties of each representative phonetic element, are very few. Combinations of previously existing vowels or consonants do not constitute new sounds, nor does the spread of anaptyctic vowels produce new sounds. Ellis considers that the vowel sound in *but* made its appearance in the seventeenth century; it is, however, the vocalic element of final English *r*, and had no doubt been long heard, in some mouths, in some words. An alphabetic character represents merely the average of a frequently wavering sound; *a* wavers between *e*—*a*—*o;* the final limitation of the range of diversity in utterance, so that some words have one position, some another, does not constitute even a change of sound; it is simply a specialization rendered necessary, perhaps by the increase of the vocabulary, perhaps by the loss of other methods of inflection. I have, of course, certain ablauts in mind.

Let it not be forgotten that no method will meet all difficulties. Every one knows theoretically that language is a historical science, but many are too apt to forget in practice that in such sciences complete demonstration depends upon the perfection of the record. In the study of the growth of organic life, the theory of evolution displaced the hypothesis of

successive special creations; but the new theory has by no means replaced the old with a full and satisfactory account of the growth of every distinction of species; the imperfection of the record renders this impossible. Nevertheless the gain is great: it has brought all phenomena into the same category. If now in the science of language also we assume the altogether subordinate character of phonetic change at any one period and at all periods for all phenomena, and rely as a main guiding principle upon the adjustment of the words in question to the other words in a language, the special difficulties enumerated above disappear, and something like harmony between the various conflicting facts is discerned. Popular etymologies, for example, are not exceptions; they are in general accordance with the prevailing tendencies. Nor is the result in discordance with orderly law, but rather leads the student to seek for the manifestations of law in the whole constitution of the language rather than in the separate development of the single vocable.

The principal errors in the received views (and in the new views) seem to me to be three. First, it is erroneous to treat the growth of the phonetic form of a word as if there were question of, so to speak, one continuous individual, for whose physiological alphabet a definite series of mechanical changes might perhaps be presupposed. Secondly, it is erroneous to impute most received changes to the mouth. Thirdly, the received views fail to take complete account of the indefinite number of varieties in the pronunciation of individuals and in that of the individual himself.

Thus, in explaining the palatalization of ʒ in English, and its final reduction to *i* or *y*, it is customary to assume a series of intermediate sounds, each genetically connected with the one before it. But the individual dies; his special mouth position is not inherited; the language is transmitted solely by the *ear;* and the question is, at any rate, not what should be the next stage of any particular mouth position, calculated on the basis of the muscular actions involved, but what is the next stage *learned,* — and this too not from one individual and for one word alone, but from a whole community and for a

whole vocabulary. Every generation makes a break in the genealogy of the word.

Again, the defects of the ear should be better understood. For instance, it is remarkable that, despite of the great amount of attention paid to the subject, no one is as yet able to decide definitely what constitutes a long vowel in our own English. Ellis even conjectures that they are all slides! Few Frenchmen are able to pronounce correctly upon the real character of "mute *e*" in any particular word, whether it is a distinct vowel or a protracted consonant; nor are they better able to determine the initial sound of words with "aspirated *h*." (There is in both much variation.) Ellis has pointed out that only the trained speaker keeps apart the vowel sounds in *father, cat,* and *awn;* nor again does an unpractised ear distinguish between the long and short of the vowel sound in *cat* and certain sounds lying in the middle of the series *a—e—i;* its short is confused with *e* in *met,* its long (as in Bāth) with the *a* in *Mary.* Foreigners and even Englishmen from certain parts of England make this mistake.

And so with the consonants. Very few students, if any, although taught by native Germans, notice any difference between *st* in the English *stone* and the German *Stein.* To the somewhat similar *st'one* of the Irishman they seem more awake, owing, it may be supposed, to its exaggeration on the stage and in pseudo-dialect writing, so that most beginners in Sanskrit appear to understand the appeal to the Celt. Ellis attributes to imperfect hearing certain cases of the substitution of *f* and *th* for English *gh,* and no doubt rightly; and with present lights it seems safest to attribute to this the correspondence of Latin *f* with Greek *θ* and *χ*. Of other details of this sort I shall speak farther on.

We must not forget, however, that in all these cases there is a great amount of variation among individuals.

Now, as already implied, the precise continuity of the series of changes of any sound depends upon the complete imitation by the learner of some one stage of the series. In modern English, the vowel sound in *mine* is diphthongal. Its final slide seems to be heard with fair accuracy, and is pretty much

the same everywhere. But there is great diversity of opinion respecting the quality of the initial element, this being variously pronounced to be the vowels heard in *hat*, *want*, *but*, etc., and several varieties of each; it is difficult to define accurately, and in consequence all three varieties coexist, not merely as dialect differences, but on the same ground and in the same person, although all have in certain words displaced one and the same *i* sound. There is also much, if not as much, dissent with respect to the diphthongs *oi* and *ow*, and much variation. Since this is the case, it is useless to look for phonetic continuity in the history of these sounds through several generations.

Now the learner, in fixing upon his own special mouth-position, is on the one hand affected by the above described deficiencies of the ear, and on the other, is by no means limited to the imitation of one word pronounced by one teacher. He must learn a whole vocabulary, and, first and last, from a great number of teachers, so that many varying positions are presented to his ear. His standpoint with respect to these is naturally eclectic; he inclines to select one, and to use this one in all the words which appear to him to have the several related shades. In doing this he treats his own language precisely as, in later life, he may treat foreign words; he who for the first time hears the German *Müller* will give it some sound belonging to his own fixed system, as *Miller*, *Meeler*, or even *Muller*. Of course, when his own phonetic system is once acquired and fairly adjusted, his ear will take keener note of the sounds belonging to this, but will, nevertheless, be very slow to admit others.

Only in this way is the physiological alphabet of any tongue kept within convenient limits; for, as the number of possible vowels and consonants is indefinitely great, there is no other reason why every shade of sound heard should not, if accurately learned, produce its own successor or successors, and thus in time an alphabet of unmanageable scope be generated.

Now, as the only purpose of the individual is to express meaning, there must be a certain amount of divergence between the sounds used in the various words, so that, in making

his selection, he will be guided by a tendency to differentiation. If we compare the words having in Modern English the vowels of the series *a e i* with those in Middle English having the same vowels, it will be found that extensive changes have taken place in the distribution of these sounds; this redistribution was due, as I conceive, to confusion beginning with the slides. Such confusion should logically tend to the reduction of the words concerned to the same vocalization; but this would have been fatal to the clearness of a language predominatingly monosyllabic, although a reduction of this sort has taken place in many unaccented syllables. The Sanskrit has reduced proethnic short *a* a^e a^o to one uniform short *a*; but there is in the Sanskrit no tendency to the monosyllabic form, while on the other hand a rich variety of consonantal contact has aided in differentiation. Of the results in the Semitic of a tendency to confusion among the vowels I am hardly competent to speak with confidence, but every one is well aware that in Semitic phonesis the vowels are singularly unimportant.

Thus the mouth is controlled by the ear, and the ear by the general interrelations of the whole vocabulary.

This conception of a constant reference to the whole vocabulary in the general adoption of any particular change is, of course, not new. It is generally admitted in a number of processes, such as the formation and the various successive remodellings of grammatical systems, the very frequent alterations of noun and verb stems, and of accentual systems, all together constituting a considerable body of phenomena. No other explanation has ever been offered of Semitic triliteralism. This triliteralism is a very striking feature, and yet it is hardly more striking than the extensive formation of Indo-European stems on the model of *bhara* (a^e or a^o); indeed Fick was so impressed with the frequency of this method of stem-formation that he assumes the dissyllabic form for the Indo-European root. The tendency in Modern English to monosyllabism; that curious process, noted by Ellis, in virtue of which a certain quantity is given to monosyllables, so that either the vowel or the consonant is long, as in *tell*, "*teil*" [*tile*]; such

peculiarities as our habit of closing short syllables by doubling, or at least attaching a following consonant (Mätzner), — all of these show clearly how insufficient it is to study the changes of a word with exclusive reference to its independent phonetic constitution. To causes of less wide range belong popular etymologies and false analogies. These affect in general single words, but must be mentioned here from their very great number. Probably very few, not special students of comparative philology, have any adequate conception of their numerical extent, and the number known is rapidly increasing. It would seem as if no vocable could, in all of its forms, be kept quite free from some species of contamination.

Most commonly recognized cases of change, not due to independent phonetic action, owe this recognition to the distinct relation of their meanings with the meanings of the words influencing them. The tendency towards distinctness of meaning operates, however, in various ways. Differentiation is one outcome of its activity, and especially that differentiation already described, which in the end tends to redistribute in an unaltered condition the various sounds of one physiological alphabet among the words of the tongue. Such action, contemplated in its ensemble, seems almost without cause.

This tendency is perhaps best seen by comparing the present distribution of our vowel sounds with that prevailing four centuries ago, or with the Anglo-Saxon. That these changes have been greater in English than in any other modern tongue is well known, and the general features of the changes are also too well known to need description or illustration. The subject is complicated, and could be treated exhaustively only by citing nearly all the words recorded by each successive generation. I have, however, selected a few typical cases, relying in the main upon the facts furnished by Ellis.

Take, for instance, those words which in the English of Chaucer's time had the vowels A, E, I.[1] Probably the pronunciation prevailing at that time, as in the Anglo-Saxon, did not materially differ from that of the Italian. Yet very many

[1] To avoid confusion, capitals are used to denote the Italian sounds, whatever the spelling.

of those then pronounced in Middle English or in Anglo-Saxon with A have now the sound E, as **macian**, *make;* many then sounded with E have now I, as **mê**, *me;* many then with I have now a diphthong (of uncertain and varying character); thus **mîn** has become *mine.* There is a kind of vowel rotation here which in results, and perhaps in cause, is not unlike the rotation of the mutes; and if we take into account the dialectic A for I (Leeds *waal* for *while*), the parallel is complete. It will be understood that I am, in the main, speaking of the vowels of accented syllables.

These three changes can be considered by themselves, although, were the examination to be exhaustive, all the vowel sounds of the language should be considered.

They were not due to any supposable alteration in climate. Independent of the very sufficient reason that influence of climate has never been shown in the case of alteration of any sounds in any language, and that there are in this case no migrations in question, the following considerations should be weighed.

A, E, and I have remained in the language, and have merely changed the words in which they occur. Where sounds disappear, some mysterious influence of the sort may possibly be supposed to be at work, but in no other cases. Furthermore, the distribution in the dialects has been very irregular. Localities lying side by side, as east and west of the Derbyshire Peak, betray different tendencies. Again, the special change seen in the alteration of **mîn** to *mine* appears also in Dutch and in German; in none of the three languages, English, Dutch, or German, have the alterations affected the whole district. Any supposable influence of climate, or influence kindred to that of the climate, must have operated in curiously scattered localities, and, what is absurd, in particular words.

It is, in view of the latest prevailing phonetic theories, a point of special interest that these transfers have affected the vocabulary gradually, extending from one word to another; this is of special interest because the possibility of word to word changes has recently been denied. The displacement of I by the diphthong (as in *mine* for **mîn**) and of E by I (as

in *me* for *mi* began in the fifteenth century and occupied a long time. For the fifteenth century there is little material, but in the sixteenth the diphthong is contending with I. Two writers on phonetics, Palsgrave (1530) and Bullokar (1580), still give the old I-sound for some words formerly possessing it. Even in the seventeenth century Ben Jonson does not even mention the diphthong, but writes *allve, drive, title,* for *alive, drive,* and *title.*

The same gradual word to word displacement appears in the substitution of I in words formerly pronounced with E (*me*). And there were two distinct periods or waves of change. Beginning, as already said, in the fifteenth century, the words adopting the I-sound were, with some exceptions, written with the characters *ea*. Those that retained the old E-sound were written with the characters *ea* (again some exceptions); and the characters *ea* retained the E-sound in most cases through most of the seventeenth century, although some few of these also had changed to I by the close of the seventeenth. Ellis gives a list of twenty-eight; but the invasion was not uniform, different phonetists of that time giving different lists.

But between 1710 and 1766 the words spelled with *ea* suddenly change their pronunciation to I, the sound given to them at present. We have then two periods of change. Now it is a fact of the greatest importance that these two periods of the transfer of I to the E place are synchronistic, the first (fifteenth century) with the beginning of the change of old I to the diphthong, the second (1710–1766) with the transfer of E to the words formerly pronounced with A (**macian** to *make*). This last alteration had appeared at the close of the seventeenth century, says Ellis, in "many words." Yet these could not have been numerous, since Cooper (1685) is the only phonetist to acknowledge it; Jones, in 1701, does not recognize it. But Franklin (1768) gives the present use.

These three transfers have never been completed unto this day. Whatever the past history of the words concerned, we still find remnants of the old A-sound in *fāther, rāther, dānce, chānt,* etc. By Walker's authority, there were fewer of these

in the last century. Provincially short *a* has still this quality. Some words, too, have resisted the transfer of accented I to the diphthong, as *kindred, children, wind* (noun), *hinder* (verb). Some irregularities of this sort might of course be explained as due to analogy (*kindred* to *kin*) or to differentiation (*hinder*, verb, from *hinder*, adj.). There is much wavering. Borrowed words acknowledge no fixed rule, as Mätzner remarks; thus in *civilization, digest, bovine*, etc., where there is wavering between the diphthong and other sounds. These are foreign words; but the tendency to inorganic transfer is all the more evident. Our suffixes *-y* and *-ly* vary between the diphthong and two shades of short *ĭ*. As regards *-ly*, the opinion of Gill (1619), to the effect that the pronunciation with the diphthong is more dignified, shows very well how little mechanical phonetic force had to do with its adoption. So also the pronunciation E is still retained for some words with characters *ea;* as *great, steak, break*, besides a considerable number such as *bear, tear* (verb) where the E-sound lies at the basis.

Now these alterations are not due to independent phonetic action, whether consisting in the influence of a following consonant, or in simple decay, or in some more obscure change in the mouth positions.

That they are not due to the action of the following consonant will hardly need discussion, as the combinations are so varied. It may, however, be noted that were the consonants the cause of the alteration, it should have begun with the change of the slide between vowel and consonant. Now in the word *mine*, for instance, the slide is unchanged: it is, as always, a more or less pure I, the old sound of **mîn** retained. The change concerns merely the varying initial element of the diphthong. I shall try to show farther on that it may have been the identity of the slides that gave the phonetic impulse to at least the confusion between E and I.

This will perhaps be a proper place to remark that it can hardly be correct to attribute the retention of A in *dāncе, grāsp*, etc. (as pronounced by some), to the following consonants. The vocalic tone of *n* approximates to short U, that of *s* to some variety of short *i* (as in *pin* or *happy*), or to *e* in

met. That these consonants are continuable might indeed account for the so-called long quantity (if it exist).

As to some form of simple "decay." As A — E — I form one side of the vowel triangle, it seems at first sight not unnatural to suppose that the change of A to E and of E to I are due to attenuation, and this seems to be Ellis's opinion. But why should A, the most open of all three, have been the last to alter, and why should I, the closest of all, have become a diphthong?

The special case typified by the alteration of mîn to *mine* has been pronounced "a progression due to accentuation." It happened, of course, under the accent: such long quantities as the English possesses can hardly creep in anywhere else. But both phenomena, namely, the supposed "attenuation" of A and E to E and I, and the supposed "progression" of I under the accent, had a certain definite date of appearance and a tolerably rapid development. But the factors involved in the solutions are not new: E was, if not proethnic, at any rate general Germanic; the position of I under a *stress* accent was probably also general Germanic. Some other impulse of a new character should be sought for, although, as in all historical investigations, it may escape our scrutiny. Both solutions, it may be remarked, would have been more readily accepted ten years ago than now. At that time the Sanskrit vowels were taken as showing the proethnic basis, so that the "attenuation" (or the "decay") of A to E and of E to I was thought natural and very common. So also AI was considered as a guna of I. Now, however, E has been declared proethnic, and guna is at present out of fashion, so that these parallels fall to the ground.

The change was not due to obscure independent alterations in the mouth positions.

In the first place, such alterations should affect the whole vocabulary at once, and not advance from word to word. This is one of the canons of the newer school.

Furthermore, the sounds were not new to English ears. It is possible indeed that the diphthong AI did not occur in Saxon times, although March quotes Northumberland *cnaikt*

for *cniht*, with the suggestion that the supposed "progression" began at that time [in some words]. But the elements of the diphthong existed, and their combination is no more to be considered a new sound than the consonantal diphthong in *φρατρία*, due to the loss of a vowel between τ and ρ, can be considered such. And there existed in English, prior to the period (fifteenth century) when the displacement of I began, a number of diphthongs corresponding closely enough to the diphthong in question. Norman *ai* and *ei* were pronounced by Englishmen as AI. English *ai, ei*, etc., arising from the palatalization of Anglo-Saxon ȝ after A, E, etc., at least as early as the thirteenth century, were even then confused with each other, and in Chaucer the confusion is complete; it still exists in the various sounds given to the vowel in *mine*.

Thirdly, there should be, to establish the reality of an obscure change of this sort, some record of transitional sounds affecting, for a period, the whole of the vocabulary. I know of none lying between E and the later I, I and the later AI.

The case of the substitution of E for A (**macian**: *make*) is more doubtful. Ellis, who throughout his work takes it for granted that changes are effected in this way, and consequently requires little evidence, supposes that the change was made through the medium of the vowel sound in *cat* (denoted by "æ").

The dates cited are as follows: "æ" is not recognized by Ben Jonson (1640 or somewhat earlier); Wallis (1653 [1]) so describes the position of the tongue that Ellis doubtfully assumes "æ." To accurately describe the position, however, must have been an unusually good piece of phonetic work for the times, to say nothing of the fact that Wallis describes the supposed "æ" as the "Italian sound." But Ellis is on the lookout for the new sound, and says, "Nor is there any other time [than Wallis's] to which the change [of A to "æ"] can be distinctly traced." Cooper (1685) clearly indicates some shade of E for some words, as *name, cane, stranger* (he is the first to do this); while very early in the next century (1710)

[1] Several editions, but his views did not change after 1653.

E is prevalent. Cooper perhaps describes "æ" also, but not very distinctly.

Thus there is hardly sufficient evidence for intermediate "æ," when once questioned; and its reign, considered as a transition sound, even if it existed, was very brief.

I do not wish to be understood as denying the existence at that time, or any other, of the sound "æ." On the contrary, considering that few ears, even now, can be trusted to distinguish between A and "æ" in *grant*, and that "æ" and E are not unlike, nothing seems more natural than that, at a time when *nAme* was giving place to *nEme*, different ears should have fixed upon different sounds, and that there should have been then, as now, confusion between *grAnt* and *gr"æ"nt*, *calm* and *c"æ"lm*, and that Irishmen, in accordance with their general practice, should have "overcorrected" A to "æ." All this is in strict accordance with the general views here advocated.

The transition A — "æ" — E was, at all events, not imperative. Ellis shows that many words now universally pronounced, in the received dialect, with "long" A, as *dart*, *father*, had in the received dialect of the eighteenth century long "æ." I do not indeed find in his work sufficient evidence of this, but it seems so perfectly in harmony with my understanding of the subject, that I am quite ready to believe it; on any other supposition it is inexplicable.

From all these considerations, it appears that no form of "independent phonetic change" could have been the main force at work. On the contrary, the changes, taken collectively, present the aspect of simple substitutions. AI, I, and E crept respectively into the I, E, and A words, making up a veritable rotation, and one which, particularly when we take into account dialect A for I, is quite parallel to the Germanic rotation of the mutes, parallel in effect, and due, I am inclined to believe, to the same general causes. In neither this vowel rotation, nor in the rotation of the mutes, is ease of pronunciation furthered for every part of the vocabulary.

The proof that this process occurred in the manner hinted at must be sought mainly in the harmony of this with other

facts in the growth of language. But it is certainly desirable to point out, if possible, some phonetic impulse to the series of changes; that is to say, to find some source of confusion leading eventually to the redistribution of the old sounds, and, in addition, to show that the historical circumstances were peculiar.

Ellis points out distinctly that the two epochs of change, the fifteenth century, when the diphthong began to displace I and I to displace E, and the seventeenth, the period of the completion of the displacement of E by I and that of A by E, were periods of great civil disturbance, inducing a commingling of local dialects. This may be fairly interpreted as meaning that at these times the ear of the rising generation encountered very various systems of vocalization of the same words. The completion of the alteration of the received pronunciation would, for both periods, fall somewhat later. He assigns some other general causes of the mutations that the English has experienced, but all of the same nature; the influence of the French, "the parliamentary influence of provincial speakers, the general importance of [provincial] cities."

The phonetic impulse to confusion is of minor importance, and certainly very difficult to point out with entire certainty. But, taking into account the general principle that retrogressive alterations are by far most frequent, as seen in Umlaut, breaking, palatalization and assibilation, and that the confusion of the old dipthongs *aʒ*, *eʒ* and *aeʒ* was certainly due to the influence of the final *i*-sound, to which ʒ was reduced; and also that, however much the diphthongal substitute for old I may vary, the slide is very nearly the same in all mouths; taking these facts into account, it seems most natural to regard the identity between the I sound and the slide of the diphthong AI as the first impulse to the transfer. The final slide becomes specially audible in all cases of accidental or intended emphasis or protraction. This hypothesis is also in harmony with the fact that *ee* and *ea*, that is to say, characters with different finals, were the characters employed in the sixteenth century to denote respectively the two sounds into

which the older E broke up at first for older I. Dialectically, the result was to establish A; such irregularities are to be expected.

The confusion between I and AI was the starting-point. The general substitution began indeed in the fifteenth century, synchronistic with the beginning of the change of E to I. But before this, in Chaucer's time, there were certain common words properly pronounced with the diphthong, *die, buy, dry, eye, high, sly, tie,* which varied between this pronunciation and *d*I, *b*I, etc., a pronunciation still heard in the dialects. Chaucer also confused *pine* and *pain.*

It was the earliest to be completed, although I is the closest of the three vowels in question. The diphthong had finished displacing I as early as the seventeenth century, the final displacement of E by I falling at a later date.

It is an important point that the change affected at first certain individuals and not the entire community. For had the invasion of the I-words by the diphthong taken place at once and for all speakers, in a certain greater or smaller number of words, it might have stopped with these. But its invasion was gradual, from one speaker to another. The same words were pronounced by some with AI, by others with I, so that the tendency to confusion persisted until the rotation was completed.

I is now disappearing from those accented syllables in which it was formerly heard; that is to say, an important means of differentiation would be unemployed, were it not that the words formerly having E gradually assume this sound, thus securing a clearer division of the words in a language approaching the monosyllabic form. Here again the slide is the phonetic factor. The final slide of E is I, and this is specially marked in English, as is well known by every one who has tried to teach beginners the pure enunciation of the French *été; éᵃtéᵃ* is invariably heard. Ellis speaks of this slide as being particularly troublesome in English schools; it is especially audible in Yorkshire, and thirteenth century rhymes of *e* to *ei* show that the slide is not a new element.

As to the nature of the phonetic impulse that began the

substitution of E for A at the close of the seventeenth century, I have not been able to form any probable conjecture. But the most important fact, I will repeat, is that it was synchronistic with the introduction of I into the remaining E-words.

In complete harmony with the process, thus defined, are the various irregularities in the received and the provincial dialects, such as the extension of the new sounds to words having originally a vocalization different from that commonly displaced by them; the displacement of *oi* as in *jAInt* for *joint*, of a labial vowel as in *contrIve;* cases like "*clark*" "*vardict*" for *clerk* and *verdict;* the remarkable Teviotdale *bAI, mAI, knAI,* for *bee, be, me, knee,* etc. In some cases, as notably in the above-mentioned interchange of *oi* and AI, the literary dialect has wavered between the old and new forms, and has finally readopted the old sound. About the beginning of the eighteenth century, when the second alteration of E to I was in full tide, *break, great, yea,* and *steak* were pronounced *brIk, yI,* etc. And our present *friend, seldom, leisure, tenure, tenable, ere, chair,* etc., all fall under the E class of sounds, yet *frInd, sIldom,* etc., were heard at various times from 1580 to 1701.

These, and cases like Scotch *bain, stain,* etc. [*ai* as in *ailing*] Aberdeen *bIn, stIn,* and English *bone, stone,* etc. (the Anglo Saxon having *à*), are not to be explained as a genuine phonetic outcome of the primitive sounds, and may also throw much light on the character of the relations of the Germanic to the supposed primitive vocalization, and the origin of ablaut relations. In these Scotch sounds, Ellis recognizes the true character of the process.

To trace the changes in the other side of the vowel triangle, O—U, would lead too far. The subject is, moreover, much more complicated, involving the consideration of O, U, Ü, and IU. Whoever prefers to talk of "attenuation" will find in the change of O to U an interesting parallel to that of E to I; but all these changes are properly treated only with reference to other synchronistic mutations. None of these sounds were new, unless the combination IU be so

considered; the phenomena of word to word extension, retention in the dialects, rotation, and reorganization of the vocabulary, are repeated here. It is interesting to note that the difference between Ü and IU is shown by the experience of a trained ear [Ellis] to be difficult to recognize; in studying the Cumberland dialect he at first completely confused them. So also Cooper (1685) and Wilkins (1688) hardly knew what to make of Ü.

Nor can I dwell long upon the very valuable evidence to be derived from the unaccented vowels in English. March speaks of "the light *e* [Ĭ] that stands as the ghost of almost any sound." These light sounds are generally considered difficult to characterize phonetically, but it is perhaps nearer the truth to say that they vary indefinitely. The trained ear can generally determine the character of one single sound, once pronounced by one person; but certainly no abiding results can be attained, if the student starts from the faulty premises that it is always the same in the same word and for all persons. The final vowel in *heaven*, for instance, is not at all "obscure"; it *varies* between *ĭ*, *ŭ*, sonant nasal, and (vulgarly) *ing*, or rarely sonant *ng*. The unsettled character of these sounds is most clearly seen in certain proclitics, as *the*, *my*, in which there is not the slightest difficulty in deciding whether *the*, *thĭ* or *thŭ*, *me*, *mĭ* or *mŭ* has been heard. No phonetic treatment will prove satisfactory for such cases.

Among the most remarkable instances of the displacement of other vowels by short vowels, in English, is the reduction, at various periods, of initial syllables to one common sound. *A* in *alight* represents *of-* and *on-*; in *anoint*, *e-*; in *along*, *and-*. Some, as *aghast*, *agone*, base upon some equivalent of Gothic *us-*. *Aware* presents a corruption of Middle English (*i-* or *y-*), which is again a corruption of *ȝe-*. Thus also *iwiss* (German *gewiss*), and there is a very curious blunder (Skeats says of the editors) making it "I wis." In *aroint* (*rynt*) and *ahoy* (*hui*) the prefix is altogether inorganic. These cases are not mere shortenings; they constitute a species of striving after harmony in initials, and also illustrate in a striking manner the non-mechanical origin of many inorganic sounds.

Probably the process was furthered by the frequent use of the article, whose loss of *-n* was partly due to some confusion of the sort. Were these simple shortenings, the sound *ĭ-* would have been one of the common initials. Want of space prevents any detailed application to certain very puzzling prothetic vowels in Greek: the perplexity of the phonetist respecting the initial in such words as *ἐρέφω* and *ὄροφος* is amusing.

I may, however, call attention to the singular accord within most languages in the development of the svarabhakti vowel from sonant nasals or liquids, and the equally singular diversity between the languages. There is no reason to suppose that there was a difference in the vocalic quality of *r̥ l̥ m̥ n̥* in the various Indo-European tongues, yet the Greek has, for instance, altered *r̥* to *αρ* or *ρα*, the Gothic to *ur*, the Latin to *er*. Greek also presents *ορ ρο ω ρι υρ ρυ*. All these facts point not to a mechanical evolution of a svarabhakti sound, but to a transferred uniformity.

The same principle should be kept distinctly in sight in discussing a great number of very various phenomena. Some of these are of importance in connection with the general comparative philology of the Indo-European, such as the ablaut, the relation of the a^e and a^o roots, which recent treatment has simply rendered mysterious; some are sporadic, such as the systems of final sounds, the reduction of the Indo-European reduplication vowel to a^e, the loss of the power of forming compounds; and, still more sporadic and of less importance, such single cases as the confusion of *sk* and *ks*, of initial *wh* and *w* (first properly treated by Haldemann) in *witch*, *which*, *way*, *whey*, etc., resulting locally in the expulsion of "*hw*," inorganic final *-r* in English cockneyisms, *σκέπτομαι* for **σπεκτομαι*, etc., etc.

One of the most mysterious series of changes is the rotation of the mutes. Now it may never be possible to point out the precise starting-point of this remarkable phenomenon; and yet something is certainly gained if it becomes possible to deny to it an exceptional character.

There is, in the character of these mutes, variation and, it is to be added, indistinctness of enunciation, sufficient in

degree to lead to confusion and consequent reorganization of the words into which they enter, such as I have described as distinguished from strict phonetic evolution.

There is certainly great variety in the production of the sonant stop. Most Englishmen and Americans define it as due to vibration of the vocal chords; most Germans describe it as simply a weaker sound than the surd (a difference not to be denied, as an additional element, in any definition). This difference in opinion is certainly due to a difference in the method of production of the sounds; that is, in order to differentiate words, different expedients are resorted to in different localities, — a fact wholly at variance with the assumption of the unbroken genealogy of the words in any line of strictly phonetic descent.

Even the different positions are not distinctly separated one from the other. Every one knows the fact (quoted in this connection by Max Müller) that certain non-Indo-Germanic peoples, besides mingling surds and sonants, confuse *k* and *t*. Ellis quotes *dl* for *gl*, *tn* for *kn*, and confesses that he found himself to have been in the habit of pronouncing τλάω and κλάω alike; and he also attributes to the ear the fact that older *gh* is represented in late English by *th*, *dh*, and *f*.

There is great diversity in the precise position of the various front and back palatals. For instance, a *t* is by some made nearer to the teeth than by others. Not merely do conterminous districts differ in this regard, but different persons in the same districts. But a dental *t* easily passes over into þ (Ellis).

It is no part of the purpose of the present paper to attempt any detailed explanation of Grimm's Law, and least of all to present what would run the risk of being considered an à priori stic theory. Only this: every investigation must build upon some basis laid down in consequence of the student's general understanding of the main analogies of the facts before him. If the views set forth in the preceding pages are correct, it follows that the distribution of the mutes among the words of any of the languages concerned must be considered as regulated by the eventual adjustment of the meanings, and, as

a farther consequence, that particular vocables in the Greek and Sanskrit are not, more than in the Germanic, to be regarded as necessarily presenting the proethnic stop. As a tentative application: in a series like that treated by Verner, *bhrâtar–*, *mâtár–*, *pitár–* : *brôþar*, *môdar*, *fadar*, the very different character of the indubitable agent-suffix in *bhrâtar–* and the very questionable suffix in *mâtár–* and *pitár–* should have been considered. No one can call in question his brilliant deduction with respect to the accentuation; but the further assumption of a lost þ in *môdar* and *fadar* is a different matter.

The result of the considerations adduced in the foregoing pages is to discredit the strict genealogical connection of the form of the word with, or its deduction from the ultimate root to which it is to be referred, and more than this, with its immediate predecessor. That such a method of investigation is difficult to apply, and must of needs result in some uncertainty, may at once be granted. That, on the other hand, it should result in mere guess-work etymology, such as that of fifty years ago, would be an unwarrantable deduction. On the contrary, nothing but the most exact study of all the known laws of phonetic change, with constant reference to the severest methods of the most rigid adherents to phonetic law, will enable the student to determine, for any special case, where and how the influence of contemporary words is in question. Accurate work of this sort is all the more imperative upon him, because he must determine the possible range of individual sounds; most etymologists have laid themselves fairly open to the charge of neglecting this important matter altogether.

That view which looks upon a word, in all its relations, in form as well as in significance, as a product of the whole contemporary vocabulary, and not as a distinct individual, pursuing an almost independent line of development, does not lack some of those characteristics which belong to a broad conception of the nature and function of speech. It is, above all, in complete harmony with the phenomena presented by the growth and change of meanings. For these, it is well known that no necessary genealogical sequence is to be looked for.

V. — *Quantity in English Verse.*

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Among the Greeks of the classical period, when poetry and music blended into song, poetry was the guide and mistress. Tune and harmony were an ornament and an additional means of expression, enhancing the beauty and reënforcing the significance of the poetry; but they always accepted the law of rhythm from the words; the relative quantities of the spoken syllables constituting the verse were identical with the relative lengths of the musical notes. This relation between the two arts was to the Greeks not only natural, but necessary; and any state of these arts which could allow the reversal of this dependence would have seemed to them a sure sign of barbaric taste.

One consequence of these well-known facts was, that no confusion of thought existed as to the nature of rhythm in Greek poetry. Rhythm of verse and of music were plainly one; in instrumental music a succession of sounds having the same tone-color was substituted for a succession of sounds of widely varying tone-color embodied in words. Thus every element which could effectively obscure the matter was removed; here, then, the nature of rhythm in general and of each particular variety of rhythm was so clearly perceptible that no one who gave attention to the subject could mistake. And so poetic rhythm, as well as orchestic and musical rhythm, was understood to be *χρόνων τάξις ἀφωρισμένη*, a definite arrangement of times. The individual times were seen to be fixed by the natural, ordinary pronunciation of the individual syllables, as they succeeded each other in connected discourse. It was seen that in ordinary, natural speech the voice unconsciously divided the flow of syllables into little groups, consisting each of a small number of syllables; and, further, that this division was effected and marked by a greater or less increase

of force or stress in the enunciation of at least one syllable of each group. Such an arrangement of times, thus effected and thus marked, was certainly recognized by Demosthenes even in prose; but in verse the arrangement of times was more pleasing, because less complicated, less shifting, more easily followed. And in verse it was seen that the rhythmical character of the various groups of syllables, called feet, — and hence the rhythmical character of the lines made up of two or more feet of the same kind, — differed markedly according to the number and relative lengths of the syllables constituting the single feet. Accordingly, the Greeks distinguished between the different kinds of syllabic groups by calling them feet of three times, four times, five times, or six times. Or in modern musical terms we may say, as our grammars now do, that trochaic verse, for example, had three beats to the measure, dactylic four beats, cretic five beats, ionic six beats. These distinctions were rightly regarded as essential, fundamental, as we now regard the like distinctions in music.

But that which to the Greek was inconceivable came to pass. Music, which was supposed to have already reached maturity, as sculpture had, was really in its infancy, and proved to be an infant with prodigious powers of growth. In the course of a few centuries it cut loose from leading-strings, and became the art above all others fitted to express the complexity of modern civilization. Musician and poet were no longer one person. The musician not only refused the poet's dictation, but, conscious of the dignity and powers of his own art, generally declined all assistance from the poet except on terms humiliating to poetry. If words were set to music, their sounds were prolonged, shortened, divided, tormented perhaps out of all resemblance to words, and made, at the will of the composer, mere vehicles for musical notes. Under these conditions, then, music had become a hindrance, instead of a help, to the perception of poetic rhythm.

And all this while poetic rhythm itself, following the changing vernacular of the people in whose life poetry had its roots, was changing greatly, not indeed in its essential nature, but in its forms and minor laws. Poets wrote by ear, as no

doubt Pindar did, and the people needed no technical instruction to enable them to recognize the correctness of the measures. Then when the learned first attempted to give a scientific description of the rhythm of popular English verse, they approached the subject from a wrong standpoint. Instead of simply listening to their own reading of such verse, and describing what they heard, they used as a standard of comparison their conception — a partially mistaken one at that — of classic prosody. And after it was fully recognized that English verse follows laws of its own, of equal dignity with those of classic verse, then the differences between English and classic verse appeared so great that all likeness was overlooked. Greek verse was quantitative; it is often forgotten that it was also in a certain sense accentual, in that the ictus, dividing the times into groups, was an essential element. English verse is accentual; it is usually forgotten that it is also in a certain sense — a correct sense too — quantitative, in that the times marked off by the regularly recurring accent are an essential element here, as in all rhythm. In short, rhythm of verse is identical in its nature with musical rhythm; this holds good in modern English, no less than in ancient Greek. The first writer, apparently, to make clear the full significance of this relation between verse and music was the late Sidney Lanier, himself a trained musician as well as a poet of indisputable genius, however uneven his achievement. Owing, however, to his faulty method of presenting the subject in his volume, "The Science of English Verse," (New York, 1880,) and owing also to the intermingling of not a few errors, many readers have been so repelled from the book as quite to overlook its kernel of truth. Yet his recognition of the real nature of poetic rhythm in modern English seems to me to be of great value, and furnishes the starting point of this paper, although my treatment of the subject diverges widely from Lanier's.

Let it be clearly stated, at the outset, that the subject of our study is not detached words, nor written verse, but words combined into sentences in spoken verse. This caution is necessary, because of the elasticity of English quantities. The time

given to a word or syllable pronounced by itself may be a very different thing from the time given to the same word or syllable pronounced in combination with others. To test this very simply let one pronounce separately the words *I, from, of, and.* Then let him pronounce the line,

"I come from haunts of coot and hern,"

and observe the difference in quantities.

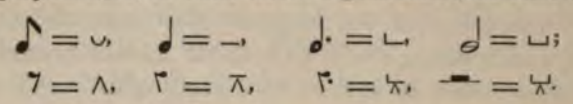
Looking now at English verse as a series of spoken words, we find that here, as in Greek, rhythm is a definite arrangement of times; that the individual times are fixed by the natural pronunciation of the individual syllables as they succeed each other in connected discourse; that the voice unconsciously divides the flow of syllables into little groups consisting each of a small number of syllables; that this division is effected and marked by an increase of force or stress in the enunciation of at least one syllable in each group. Furthermore, the rhythmical character of the various groups of syllables, called feet, — and hence the rhythmical character of the lines made up of two or more feet of the same kind, — differs materially according to the number and relative lengths of the syllables constituting the single feet. Accordingly, we should distinguish always between the different kinds of syllabic groups by calling them feet of three times or feet of four times. Feet of five times we do not possess; feet of two times and of six times are not employed continuously. And these distinctions by no means belong to the personal element, but are essential, fundamental, as are the like distinctions in music. In all these particulars English verse is like the Greek. Is not English verse, then, genuinely quantitative? The answer will depend on the definition of the term quantitative, and we need not quarrel about mere nomenclature. If the term quantitative is to be applied only to verse, every word of which retains in all metrical combinations the same relative quantities which it has when pronounced alone, then Greek verse certainly is not quantitative. For every one who reads Pindar in correct time is aware that a trochaic word, for instance, bears in dactylo-epitritic verse different relative quantities

from those which the same word bears in logaoedic verse; that a cyclic dactyl is not identical with a common dactyl in its time; that "short" syllables are sometimes lengthened and "long" syllables shortened. Again, if the term quantitative be restricted to verse of which only a certain percentage of the syllables, say thirty per cent, may be short in some combinations and long in others, then of course Greek is quantitative and English is not. If, on the other hand, the term quantitative be applicable to all verse in which, as it is correctly spoken or read, a definite arrangement and regular succession of times is heard, then English verse is quantitative, however the quantity of individual syllables may vary in different combinations. This last use of the word seems to me the proper one. But if any one contends that the second is the only proper sense of the word, — that no verse is to be called quantitative if more than a certain small percentage of the syllables might have in other combinations very different quantities, — his objection concerns my nomenclature merely. But what we are now interested in is the state of the facts themselves, not the label to be assigned to that state of facts. With most Greek syllables the variability in quantity was confined within comparatively narrow limits. The majority of English syllables, on the other hand, may vary from one extreme of quantity to the other, according to the character of the adjacent syllables and accents; but the quantity in one combination is just as "natural" as the quantity in the other combination, and in each combination equally the result is a definite arrangement of times, — so definite that all readers agree substantially in uttering the series, which is therefore capable of simple and sufficiently accurate notation.

All this is not in the least inconsistent with the statement that English verse is based on word-accent. The only essential element of our word-accent, in connected discourse, is increase of stress, greater distance of vibratory excursion, in the enunciation of one or more syllables of a word. Change of pitch to higher or lower often accompanies the increase of stress, but is often absent. In chanting, for instance, and often in impressive ecclesiastical reading of the Scriptures,

accent is perfectly distinct and natural, without change of pitch; and in general, in reading poetry, or in dignified utterance, the speech-tune is almost purely a means of rhetorical effect, and certainly has nothing to do with rhythm. Further, the position of the primary word-accent is fixed in most words of more than one syllable, while no emphasized monosyllable can be treated as unaccented. The English poet, therefore, must so choose and arrange words, that, when the line is read naturally, the principal word-accents shall coincide with and distinctly locate enough of the rhythmic ictuses to enable the voice unconsciously, or at least with slight effort, to locate the other rhythmic ictuses, and so divide the flow of longer and shorter syllables into groups having the desired rhythmical character. And this procedure is not altogether unlike that of the Greek poet, if in the description we substitute for word-accent word-ictus. For the Greek word-accent was of course a totally different thing from ours, namely, a certain elevation of pitch. The course of development of the ancient pitch-accent into the modern Greek stress-accent is obscure; it may be that even in the ancient speech the elevation of pitch on the accented syllable, when the word was pronounced alone, was accompanied by a slight increase of stress. But certain it is, that the increase of stress, if present at all in these circumstances, was so slight that Greek and Latin writers on accent, so far as we know, did not recognize it. It is also certain, that, if present at all, this increase of stress accompanying the pitch-accent was in the rhythmical structure of both prose and poetry wholly disregarded in favor of a stronger word-ictus, which latter was made as essential an element of poetic rhythm as the stress-accent of English is in our poetic rhythm. The only difference which we need note is, that this Greek word-ictus seems to have varied its position in the word according to the quantitative character of the adjacent syllables, much as English quantities vary according to the accentual character of the adjacent syllables. Finally, it is evident that word-ictus, metrical ictus, English word-accent, and musical accent are essentially the same thing, namely, increase of stress.

The truth of the foregoing remarks will be best seen from examples of various kinds of rhythm in English poetry. The system of notation used for recording musical rhythm is adequate and convenient for noting metrical schemes, and the signs and terms commonly employed by writers on classic metres need but trifling extension to apply equally well to English. For convenience in printing, these latter chiefly will be employed here, in their usual significance, as follows: —



Also, as classic iambic measures may be reduced to trochaic measures with anacrusis, and anapaestic to dactylic with anacrusis, and are coming more and more to be so treated, a similar method is admissible in English, and will here be adopted. This will be done wholly for convenience, for the superiority of the method in that regard is great: nothing is thereby obscured, whereas much is made clearer, and the comparison of various metres is greatly facilitated. It need scarcely be said that the character of the rhythm itself is not in the least affected by the choice of one mode of treatment rather than the other. The division is a purely imaginary and formal one, like the bar in music, or meridians of longitude. One would not seriously maintain that the location or relative distances of towns in France would be changed by reckoning longitude from Greenwich, instead of from Paris. Convenience alone should determine the choice. The method which places the ictus at the beginning of the measure is universally adopted in music, as most convenient; and if one will consider what confusion and what difficulties would be introduced if the other treatment were followed there, he will appreciate the desirability of avoiding like complications in metric. Lines therefore will be so divided into feet that the ictus shall always fall on the first syllable of each foot, admitting anacrusis and catalexis wherever necessary.

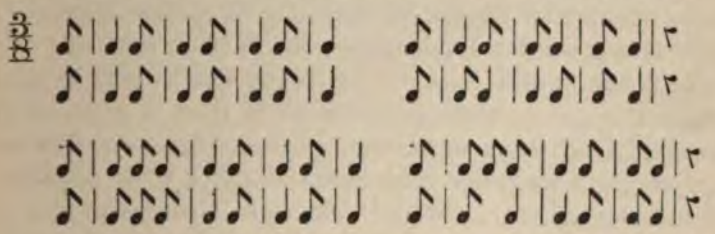
We will consider examples of triple rhythm[1] first, because

[1] Prof. J. W. White, in his translation of J. H. H. Schmidt's "Rhythmic and Metric," has adduced (pp. 35 and 57) for the illustration of Greek metres several

these are most common. Indeed the vast preponderance of triple rhythm is in great part the cause that the very existence of other time in English was so long overlooked. Two familiar stanzas from Tennyson's "Song of the Brook" exhibit in simple form the most frequent varieties of three-timed feet:

> "I come from haunts of coot and hern;
> I make a sudden sally,
> And sparkle out among the fern,
> To bicker down a valley.
>
> "With many a curve my banks I fret,
> By many a field and fallow,
> And many a fairy foreland set
> With willow-weed and mallow."

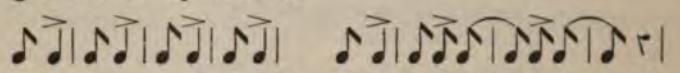
In the unforced and unpretentious reading of any person with a fair ear for rhythm, these lines, with the possible exception of one or two syllables, will be rendered in the following time, and cannot without distortion be rendered otherwise.



The first two lines of each stanza resemble the two cola of a Greek dicolic line, or two musical phrases making up a longer strain; they constitute groups having a real unity, yet the minute rhetorical pause separating them does not require to be represented by a rest. On the other hand, all readers would agree in leaving vacant the first two thirds, or thesis, of one measure, and no more, at the end of the second line, and also between the stanzas in continuous reading. In technical terms, then, each stanza may be correctly described as consisting of two anacrustic-trochaic heptapodies with caesura after the thesis of the fourth foot. In any foot but the fourth, however, there may be substituted for the trochee

ballad lines in which, in Greek fashion, the actual quantities of the syllables are reproduced in the melody. Yet even here, no obligation to follow the spoken syllables being felt, the syllables of succeeding lines suffer distortion.

either a tribrach, or what we may call an apparent iambus or inverted trochee, having a short thesis and long arsis. This poem illustrates well the frequency of inverted trochees in English, for in its thirteen stanzas more than one foot in four is of that character. If now we divide the first line in the old manner to avoid anacrusis, the scheme which we should be obliged to draw up would be



The inconvenience of such a method of division is evident; for wherever the inverted trochee occurs, this method leaves a syllable partly in one foot and partly in another, and this is objectionable.

Before proceeding to cite other passages, three remarks will be in place to guard against misunderstanding. First, if the metrical terms invented by the Greeks are to be applied at all to our mother tongue, let them by all means be used in their Greek sense. Evidently — and further examples will make the point still clearer — it is not accurate to say without qualification, as is often said, that more time is given to an accented than to an unaccented syllable. If accented is not equivalent to long, nor unaccented to short, what is gained by speaking as if they were? No end of confusion results from that inaccuracy; and since we have real dactyls, spondees, trochees, cyclic dactyls, tribrachs, proceleusmatics, and others, why dub them something else, and rob Peter to present Paul with what does not belong to him? Those terms are here used in the Greek sense. Secondly, one can scarcely condemn too strongly the practice of regarding the theoretical quantities as differing widely from the actual; of scanning as long those accented syllables which we always pronounce short, and scanning as short those unaccented syllables which we always pronounce long. We should record and regard as normal and regular that series of quantities and ictuses which is actually heard in good reading, — not some imaginary series of sounds "not heard before by gods or wondering men," unless in that same absurd method of scansion. Thirdly, however, this does not exclude such departures from

a tiresome and dead precision in the observance of time in reading as are allowable in music. The voice, with more or less of effort and of success, strives after exact proportions between the syllables of the foot, — proportions varying with the character of the metre; and these proportions alone must be aimed at by a scheme of notation that shall be practical. But this exactness, if attained, would be inartistic and unpleasing. So the graphic artist endeavors to draw correctly; but a ruled line would be intolerable. The poet may designedly put in his finest lines words by which the exact proportion of time will be broken up. This is not violating the rhythm, but rather employing it with taste and expression. Who would ask the great singer to keep the time better in rendering a simple ballad? Who, on the other hand, would change the score to represent the singer's rendering? Let the writer on metric write the poet's scores mathematically, and let the poet and reader depart from the score according to the dictates of genius and the requirements of expression. If the schemes here given be treated with the same fairness which is conceded to written music, if the proper accelerandos and ritardandos, holds and staccatos, be supplied, the notation will be found sufficiently accurate. Scanning should never go farther than to remove those marks of expression, if even so far as that.

Another song of Tennyson in triple time illustrates other frequent combinations:

"Sweet and low, sweet and low,
Wind of the western sea,
Low, low, breathe and blow,
Wind of the western sea!
Over the rolling waters go;
Come from the dying moon, and blow,
Blow him again to me;
While my little one, while my pretty one, sleeps."

— ◡ | ⌊ | — ◡ | ⌊ ||
⁓ ◡ ◡ | ◡ — | ⌊ ||
⌊ | ⌊ | — ◡ | ⌊ ||
⁓ ◡ ◡ | ◡ — | ⌊ ||
◡ ◡ ◡ | — ◡ | ◡ — | ⌊ ||
◡ ◡ ◡ | ◡ — | — ◡ | ⌊ ||
⁓ ◡ ◡ | — ◡ | ⌊ ||
— ◡ | ◡ ◡ ◡ | — ◡ | ◡ ◡ ◡ | ⌊ ||

This metre is logaoedic, trisemes and cyclic dactyls, as well as tribrachs and inverted trochees, being substituted freely for pure trochees. The last syllable of each line is represented as a triseme, because nowhere followed by an anacrusis in the next line. In practice a slight rhetorical pause may be subtracted from the time of the syllable; but this need not be indicated in the scheme, any more than rests need be inserted wherever a singer takes breath. Just as in singing, also, individuals may differ in their rendering of some few three-syllabled feet, which vary so slightly from each other. The plain tribrach is frequent in every one's reading. The term "cyclic dactyl" and the sign $\overset{-}{\smile}\smile$ have been used to indicate a three-syllabled foot of which the first syllable fills more than one third, and the second less than one third. The common value of the corresponding measure in simple music is | ♪ ♪ ♪ |, and this may be taken as the most frequent, and hence as the normal, value in reading. Other forms of the three-syllabled foot in triple time are $-\omega =$ | ♩ ♪ ♪ |, and | ♪ ♩ ♪ | or | ♪ ♪ ♪ |. But we need not dwell upon these minor differences. The fundamental character of the movement as in triple time would not be destroyed if all these three-syllabled feet were treated as variable; but in fact the majority are sufficiently unmistakable, so that a slightly different expression is given by the preponderance of any one form over the others. It may be remarked again that the ictus is always understood as falling on the first syllable of each foot, and hence it is unnecessary to indicate it in the examples.

The following lines from Keats exhibit some common forms of blank verse: —

> "Deep in the shady sadness of a vale,
> Far sunken from the healthy breath of morn,
> Far from the fiery noon and eve's one star,
> Sat gray-haired Saturn, quiet as a stone,
> Still as the silence round about his lair.
> Forest on forest hung about his head
> Like cloud on cloud. No stir of air was there, —
> Not so much life as on a summer's day
> Robs not one light seed from the feathered grass,
> But where the dead leaf fell, there did it rest."

| ‖ ⁀ ◡ ◡ | — ◡ | — ◡ | — ◡ | — ∧ ‖
> | ◡ — | — ◡ | ◡ — | — ◡ | ⌊ ‖
| ⁀ ◡ ◡ | — ◡ | — ◡ | — > | — ∧ ‖
◡ | — > | ◡ — | ◡ — | — ◡ | ⌊ ‖
| ⁀ ◡ ◡ | — ◡ | — ◡ | — ◡ | ⌊ ‖
| ◡ ◡ ◡ | ◡ — | — ◡ | — ◡ | — ∧ ‖
◡ | — ◡ | — > | — ◡ | — ◡ | ⌊ ‖
| ◡ ◡ ◡ | — ◡ | — ◡ | ◡ — | — ∧ ‖
> | — > | — > | — ◡ | ◡ — | — ∧ ‖
◡ | — ◡ | — > | ⌊ | ⁀ ◡ ◡ | — ∧ ‖

In marking our familiar "ten-syllabled" line, as it appears in blank verse, the sonnet, the Spenserian stanza, and elsewhere, with or without rhyme, we see again the especial advantage of so dividing the verse as to bring the ictus at the beginning of each foot. For in those frequent lines in which the first syllable is accented and the next two unaccented, — lines which were formerly said to begin with a "trochee" followed by an "iambus," — what the voice really does is to compress the first three syllables into the time usually given to a foot of two syllables, thus changing the trochee preceded by anacrusis (◡ | ⌣̄ ◡̄) to the tribrach or cyclic dactyl (◡ ◡ ◡ or —̄ ◡ ◡̄) without anacrusis. This fact does not seem to have been pointed out before, but it will be evident to whoever will listen carefully to any fairly good reading of such verses. In no other way than as here represented can the real relation of such feet to others be so simply and truthfully indicated. When a like variation occurs within the line, as in

"But where the dead leaf fell, there did it rest,"

the preceding syllable is prolonged to a triseme. So too, at the end of a line, if the anacrusis at the beginning of the next line is wanting, and if no decided break in the sense demands a pause, the time of the anacrusis in reality is added to the final accented syllable, which thus fills out the fifth measure. For in continuous reading the voice really makes no stop at the end of the line, with the exception, of course, that an ordinary rhetorical pause occurs there oftener than at any one place within the line; but the anacrusis and preceding catalectic foot constitute together a complete foot. Hence the simple

transfer of anacrusis to the catalectic foot makes not a particle of difference in time to the ear. Thus, in the passage above, "stone, Still as the" is the exact metrical equivalent of "fell, there did it." We meet here also instances of the irrational trochee, _ >, in which, while the thesis is unequivocally long, a syllable naturally long, because containing a long vowel or diphthong followed by an obstinately incompressible combination of consonants, or else because bearing the word-accent or rhetorical emphasis on a similar combination of vowels and consonants, is put in the arsis, where the artificial method of scanning alluded to above might lead one to expect a short syllable. The behavior of the voice in these circumstances is interesting. According to the degree of resistance to compression offered by the syllables, both are made of equal length, but pronounced in the time of an ordinary measure, or else one or both detain the voice enough to effect a noticeable retardation of the tempo, — a consequence peculiarly adapted to direct attention to the syllable thus held, and so to impress on the mind the idea thus expressed or suggested. The two effects shade into each other, and need not be sharply distinguished, so that both may fairly be noted in the scheme by the same sign. This effect is probably identical with that of the irrational trochee in Greek recitative metre. It may be that its exact equivalent does not appear in modern music; but it is nevertheless a natural one, so that no composer desiring to use it would hesitate for its strangeness, and it is very similar to the effect of two quarter-notes in treble or bass to the time of three eighth-notes in bass or treble, — a combination extending through the greater part of one of Mendelssohn's Songs without Words, and not infrequent. After the analogy of triplets, we may represent the irrational trochee in musical characters, as Lanier has done, by two tied quarter-notes. A succession of such feet tends to retard the rhythm considerably, and almost change it to $\frac{2}{4}$ time, producing sometimes a movement of great dignity, from which the voice returns, as soon as the words allow it, to the normal time. It should be noted, too, that the anacrusis and the cyclic dactyl at the beginning of a line not infrequently insist on more than their

mathematically just share of time, with like retardation of movement.

Shakespeare, relying with entire confidence on the popular perception of rhythm, constructed his verse with great freedom, as in these lines from Tempest: —

> "Through all the signiories it was the first,
> And Prospero the prime duke, being so reputed
> In dignity, and for the liberal arts
> Without a parallel: those being all my study,
> The government I cast upon my brother,
> And to my state grew stranger, being transported."

```
∪ | — ∪ | — ∪ | — ∪ | — ∪ | — ∧ ||
∪ | ∪ ∪ ∪ | ∪ — | — ω | — ∪ | ∪ ∪ ∧ ||
∪ | — ∪ | — ∪ | — ∪ | ∪ ∪ ∪ | — ∧ ||
∪ | — ∪ | ∪ ∪ ∪ | ~ ∪ ∪ | — ∪ | ∪ ∪ ∧ ||
∪ | ∪ — | — ∪ | — ∪ | — ∪ | ∪ — ||
  | ∪ ∪ ∪ | — ∪ | — ∪ | ∪ ∪ ∪ | ∪ ∪ ∧ ||
```

Here are no really superfluous syllables; all take their place easily, including the "double" or "feminine" endings. No minute study of Shakespeare's versification is here intended; but there can be no better or fairer test of the truth of the views here presented than their application to the most complicated varieties of blank verse. For example, let one apply this method of notation to the lines discussed by David Masson in his essay on the versification of Milton,[1] and judge the method by the results.

As a single example containing so-called anapaestic lines, with several instances of correption, or sixteenth-notes, before passing to the consideration of double time, the following from Swinburne will serve: —

> "When the hounds of spring are on winter's traces,
> The mother of months in meadow or plain
> Fills the shadows and windy places
> With lisp of leaves and ripple of rain;
> And the brown bright nightingale amorous
> Is half assuaged for Itylus,
> For the Thracian ships and the foreign faces,
> The tongueless vigil and all the pain."

[1] Masson's edition of Milton's Poetical Works, Vol. III. p. 206 ff.

```
⏑⏑| — ⏑ |⏓⏑⏑| ⏑ — |⏑⏑ ∧ ||
 ⏑|⏑⏑⏑| — ⏑ |⏑⏑⏑|  ⏖  ||
  | — ⏑ |⏑⏑⏑| — ⏑ |⏑⏑ ∧ ||
 ⏑| — ⏑ | — ⏑ |⏑⏑⏑| — ∧ ||
 ω| — > |⏑⏑⏑| ⏑ — | — ∧ ||
 ⏑| — ⏑ | — ⏑ | ⏑ — | — ∧ ||
 ω| — ⏑ |⏓⏑⏑| ⏑ — |⏑⏑ ∧ ||
 ⏑| — ⏑ |⏑⏑⏑| — ⏑ | — ∧ ||
```

It was said above, that a succession of several irrational spondees tends to retard the rhythm, and change it to double time. Sometimes the alteration is complete, as the rhythm of music may in the course of even a brief composition change, for example, from $\frac{6}{8}$ to $\frac{4}{4}$ time. The final verses of Emerson's "Rhodora" contain an instance: —

> "I never thought to ask; I never knew,
> But in my simple ignorance suppose
> *The selfsame Power that brought me there brought you.*"

No one can fail to perceive a difference in movement between the last line and the others; and a little attention makes it evident that the correct scheme is the following, in $\frac{2}{4}$ time: —

```
⏑ | — — | ⏖ ⏑ | — — | — — | — ⊼ ||
```

No one can read the line otherwise without making it sound unnatural or meaningless. The movement is so distinctly spondaic, that the single foot, which in other connections would be an ordinary trochee, is unhesitatingly and unconsciously made a "long trochee," to preserve the time of the foot. This particular kind of $\frac{2}{4}$ rhythm might be difficult to continue through an entire poem; but other varieties are not rare, and their naturalness is shown by the frequency of their employment by minor poets and poetasters. Children catch them as readily as they do triple rhythm. Lanier has pointed out the fondness of Mother Goose for metres in double time: any book of children's rhymes furnishes a considerable percentage of this type. The readiness with which poetasters employ this time is frequently illustrated in the newspapers. The following fragment of a bit of "spring poetry" will serve as a sample: —

"There are merry little spirits in innumerable swarms,
Of an essence so divine, and so wholly crystalline,
The fancyless know nothing of their volatile forms;
Are faithless of their being, in their own dull seeing,
And deem the thrill a madness which the poet's heart warms."

⏑⏑ | ⏑⏑⏑⏑ | ⏑⏑⏑⏑ | ⏑⏑⏑⏑ | — ⊼ ||
⏑⏑ | ⏑⏑⏑⏑ | — ⏑⏑ | ⏑⏑⏑⏑ | ⌊ ∧ ||
⏑ | ⏑⏑⏑⏑ | ⏑⏑⏑⏑ | ⏑⏑ — | ⌊ ∧ ||
⏑ | ⏑⏑⏑⏑ | ⏑⏑⏑⏑ | — — | ⏑ — ∧ ||
⏑ | ⏑⏑⏑⏑ | ⏑⏑⏑⏑ | ⏑⏑ — | — ⊼ ||

One or two other lines furnish slightly different combinations: —

"And they shout their tiny glee when the bright globes crack."

⏑⏑ | ⏑⏑⏑⏑ | — ⏑⏑ | — — | — ⊼ ||

"As a girl would unfurl her every fettered curl."

⏑⏑ | — ⏑⏑ | ⌊ ⏑ | ⏑⏑⏑⏑ | — ⊼ ||

We are not now discussing poetic thought, but rhythmically this is perfect. The great number of proceleusmatics gives a hurrying rapidity of motion, which is emphasised by the substitution of spondees, dactyls, apparent anapaests or inverted dactyls (⏑⏑—), long trochees, and feet of the form ⏑ — ⏑. The anacrusis may be monosyllabic or dissyllabic, and the lines are catalectic, smoothly dovetailed into one another.

Another poem, well known to all, seems incapable of rational metrical description on any theory of counting accents or syllables only; but when account is taken of its quantities, all becomes clear. The poem is Charles Lamb's "Old, Familiar Faces."

"I have had playmates, I have had companions,
In my days of childhood, in my joyful school days;
All, all are gone, the old, familiar faces."

⏑⏑ — | — — | ⏑⏑⏑⏑ | — — ||
⏑⏑ ⏑⏑ | — — | ⏑⏑⏑⏑ | — — ||
— ⁀ | ⌊ ⏑ | ⁀ ⏑ ⏑ | ⏑ ⌊ ||

The metrical structure is not even supported by rhyme; the rhythm which throbbed in the poet's brain was self-sufficient, and his reliance on that self-sufficiency has been justified by

its universal acceptance. Possibly a greater poet might have hesitated to put forth what was so unlike all models in vogue; but the form of stanza is not less beautiful for being unique. There are four feet or measures in the line, the last of which is everywhere dissyllabic, — a spondee, or what we may call, after the analogy of the inverted trochee, an inverted long trochee, since it has the times of the long trochee, but in reverse order. As was said above, the rhetorical pause subtracted from the time of the last syllable need not be indicated in the scheme, as we are not giving minute elocutionary directions. The second foot of each line is usually dissyllabic, and never has four syllables; its forms are the spondee, long trochee, inverted long trochee, dactyl, and inverted dactyl (⏑ ⏑ –). The first foot is prevailingly trisyllabic, in various combinations, and only twice contains four syllables; on the other hand, the third foot is prevailingly proceleusmatic, five out of twenty-one being trisyllabic. Here is abundant variety united to strict equality of line, except that possibly one line omits the thesis of the first foot, and in the last stanza two lines have an anacrusis, which in each instance fits into the last foot of the preceding line. Again, either pair of short syllables of the proceleusmatic admits in its place the two-timed trochee (–⏑), of the value ♩³♪ or ♪.𝅘𝅥𝅯. The tendency toward this substitution is the stronger from the great preponderance of triple rhythm, to which the voice returns whenever a fair excuse is given. It should be noted also, that, as in the Greek, feet in 𝄾 time have a secondary ictus on the third quarter, — a fact which assists in influencing the voice to render either half of such a foot as a two-timed trochee. As with tribrachs and cyclic dactyls, so with these proceleusmatics, the real character of the rhythm is not affected by a considerable number of such substitutions; and yet the doubtful cases are not, after all, very numerous. To complete our view of the metre of this poem, a few detached lines, with their schemes, are subjoined.

"Drinking late, sitting late, with my bosom cronies."

⏑ ⏑ – | ⏑ ⏑ – | ⏑ ⏑ ⏑ ⏑ | ⏑ – ‖

"Like an ingrate I left my friend abruptly."

⊼ ◡ ◡ | — ◡ ◡ | ◡ ◡ ◡ ◡ | ◡ ⌊ ‖

"Seeking to find the old, familiar faces."

◡ — ◡ | ⌊ ◡ | ⁓ ◡ ◡ | ◡ ⌊ ‖

Or, if Lamb gave to "ingrate" its Latin accent, the line "Like an ingrate," etc., would be more regular, thus:—

◡ ◡ — | ⌊ ◡ | ◡ ◡ ◡ ◡ | ◡ ⌊ ‖

Lanier has called attention to the readiness with which $\frac{2}{4}$ measures can be applied to comic purposes, and has given examples illustrative of this quality; but no such effect is perceptible here. Nor is there any suggestion of such an effect in Robert Browning's Cavalier's Song, "Give a Rouse," whose metre breathes a rollicking defiance suited to the words.

"King Charles, and who 'll do him right now?
King Charles, and who 's ripe for fight now?
Give a rouse: here 's in hell's despite now,
King Charles!"

— | ⌊ ◡ | — ◡ ◡ | — — | ⊼
— | ⌊ ◡ | — ◡ ◡ | — — | ⊼
◡ ◡ | — ◡ ◡ | ⌊ ◡ | — — | ⊼
(◡ ◡ | ⊔ | ⌊ ◡ | ⌊ ◡ | — — |)
| ⊔ | ⊔ |

"Who gave me the goods that went since?
Who raised me the house that sank once?
Who helped me to gold I spent since?
Who found me in wine you drank once?
King Charles," etc.

— | — ◡ ◡ | ⌊ ◡ | — — | ⊼
— | — ◡ ◡ | ⌊ ◡ | — — | ⊼
— | — ◡ ◡ | — — | — — | ⊼
— | — ◡ ◡ | — — | — — | ⊼

"To whom used my boy George quaff else,
By the old fool's side that begot him?
For whom did he cheer and laugh else,
While Noll's damned troopers shot him?
King Charles," etc.

◡ | — ◡ ◡ | — — | — — | ⊼
◡ ◡ | — — | — ◡ ◡ | ◡ ⌊ | ⊼
◡ | — ◡ ◡ | ⌊ ◡ | — — | ⊼
— | — — | ◡ ⌊ | ◡ ⌊ | ⊼

Except in the third line of the chorus there can scarcely be a question about a single syllable; the time is unequivocal and an essential part of the rhythm. It will be instructive to compare the metre of the following fragment of Tyrtaeus:

Ἄγετ', ὦ Σπάρται εὐάνδρου	⏑ ⏑ | — — | — — | — — | ⊼
κοῦροι πατέρων πολιατᾶν,	— | — ⏑ ⏑ | — ⏑ ⏑ | — — | ⊼
λαιᾷ μὲν ἴτυν προβάλεσθε,	— | — ⏑ ⏑ | — ⏑ ⏑ | — — | ⊼
δόρυ δ' εὐτόλμως πάλλοντες	⏑ ⏑ | — — | — — | — — | ⊼
μὴ φείδεσθαι τᾶς ζωᾶς·	— | — — | — — | — — | ⊼
οὐ γὰρ πάτριον τᾷ Σπάρτᾳ.	— | — ⏑ ⏑ | — — | — — | ⊼

The substitutions are more various in the Cavalier's Song, but the movement and effect of the metre are the same in both; the line is of the same length, with the same pause at the end, and the same variation in the number of syllables of the anacrusis; in both the same martial music rings out.

The line of the chorus alluded to above,

> "Give a rouse; here 's in hell's despite now,"

seems entirely capable of the two readings given. Personally I prefer the former, but the judgment of an elocutionist, or of Browning himself, might differ.

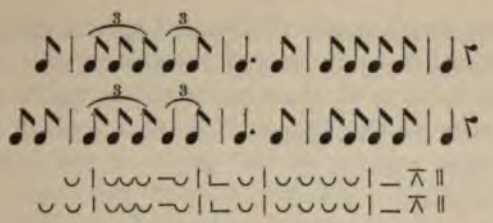
Macaulay's "Naseby" is another piece of martial verse in $\frac{2}{4}$ time, though now and then the metre limps a little. The first stanza will be sufficient.

> "O, wherefore come ye forth in triumph from the north,
> With your hands and your feet and your raiment all red?
> And wherefore doth your rout send forth a joyous shout?
> And whence be the grapes of the winepress that ye tread?"

—	⏑ ⏑ ⏑ ⏑ | ⏖ ⏑ | ⏑ ⏑ ⏑ ⏑ | — ⊼ ‖
⏑ ⏑	— ⏑ ⏑ | — ⏑ ⏑ | ⏑ ⏑ — | — ⊼ ‖
⏑	⏑ ⏑ ⏑ ⏑ | ⏖ ⏑ | ⏑ ⏑ ⏑ ⏑ | — ⊼ ‖
⏑	— ⏑ ⏑ | — ⏑ ⏑ | ⏑ ⏑ ⏑ ⏑ | — ⊼ ‖

The entire tempo is slower, in conformity with the sentiment of the poem, although the feet are to a considerable extent proceleusmatic. In two consecutive lines,

> "The general rode along to form us for the fight,
> When a murmuring sound broke out and swelled into a shout."



the first complete foot assumes the character of $\frac{6}{8}$ time. That is to say, it consists of a triplet, which we may call a two-timed tribrach, followed by a two-timed trochee.

There is no need to quote further examples. Enough has been given to show that our verse is as distinctly quantitative, in the sense above explained, as that of the classic languages, and that, although $\frac{3}{8}$ time is far more common, nevertheless we have abundant instances of $\frac{2}{4}$ time with all the kinds of feet occurring in the corresponding Greek metres. There is good reason for believing that, if English rhythm were universally conceived of as genuinely quantitative, poets would find on native soil a better field for metrical experiment than that which a school of English poets have been working, in the endeavor to revive as exotics certain artificial schemes of rhyme once current in the Romance tongues.

Coming now to the consideration of the laws which regulate the quantity of English syllables, we see at once that the laws of quantity in Greek or Latin are no guide. This fact it is, more than anything else, which has thrown students of English metre off the track. That laws exist, however, and are intuitively recognized and obeyed, is clear from the fact that fairly good readers do not differ materially in their rendering of the same passage. The poet relies with confidence on the universal perception of his rhythmical plan, without the aid of any other notation than is found in the words. Complexity of law is not absence of law in phonetics, any more than in physics. Complete formulas, perhaps, cannot at present be stated; but certain tendencies can be indicated, and partial formulas laid down to be tested and corrected later.

And, first, it must not be forgotten that the terms long and

short are merely relative. The natural speech of one person may be twice as rapid as that of another, so that the shorts of the latter, in point of absolute duration, may be no shorter than the longs of the former; indeed, an equal or greater difference often appears in the speech of one individual at different moments. A recollection of this well-understood truth lessens the apparent strangeness of the elasticity of our quantities. The characteristic quality, the entire tone-color, of a syllable may be retained whether its duration be one second or one sixteenth of a second; and the limits of customary variation are probably wider in English than in Latin or Greek. Again, as to duration, it is necessary to distinguish between vowels and consonants in a given syllable; for often it is wholly in the latter that the capacity for prolongation resides. This has been noticed by Sweet,[1] who was led by his study of Danish pronunciation to observe and state some of the laws governing the variations of quantity in English consonants. And, finally, an important element to be considered is position in the foot, or the relation of the given syllable to thesis and arsis. Nearly if not quite every vowel and diphthong in our language, as spoken to-day, occurs in both quantities.[2] That diphthongs as well as vowels are frequently short, may be seen by any one who will read a page of English poetry; the number of words, however, containing doubtful vowels or diphthongs, that is, vowels or diphthongs which are, in the same word-form, now long and now short, is not so great as might seem at first sight; for the variability of syllables resides largely, as was just said, in the consonants. Let us look more closely at these latter.

It is evident that the five liquids (*l, r, m, n, ng*) are as capable of prolongation as vowels, and may easily become vocalic, or syllable-making. Indeed, the vowels *l* and *n* are well recognized in English, while vocalic *r* and *m* are widely current in careless pronunciation. But while remaining distinctly on the consonantal side of the line, the liquids are variable. For example, Mr. Sweet, in the paper above quoted (On Danish

[1] On Danish Pronunciation, Trans. Phil. Society, 1873–74, p. 110.

[2] Cf. Sweet, Proceedings of Phil. Society, March 19, 1880.

Pronunciation), has shown that "they are [in detached words] *long* before voice, *short* before breath consonants," comparing *build* and *built*. Scarcely less variable are the sonant fricatives and sibilants (*v*, *th* in *the*, *z*, *zh*), close beside which stand the corresponding surds (*f*, *th*, *s*, *sh*). In pronouncing a mute, also, the contact which prevents escape of breath endures for an appreciable time, during which the breath behind the barrier is gathering (in the sonants), or simply held (in the surds), for the more or less explosive exit. This period of contact is longer when the mute is succeeded by a rhetorical pause, or by certain consonants, than when succeeded immediately by a vowel in the same word, or an unaccented syllable of a following word. The prolongation of a final surd mute is least easily detected in its real character, but is none the less real. What we call the doubling of such a consonant — as in *cat-tail*, *sack-cloth*, *hop-pole* — is the same thing exactly.

When now we come to combinations of consonants, accustomed as we are to Latin and Greek rules, it is not the length of such combinations, but their shortness, their failure to make position, which needs explanation. Does not that explanation lie partly in our greater familiarity with combinations which to the Greek or Italian would have seemed wellnigh impossible to utter? In one hundred trimeter lines, about twelve hundred syllables, taken in sets of from ten to twenty lines from the Prometheus of Aeschylus, there are twenty-eight syllables in which a vowel is followed, in the same or the next word, by three consonants, and none, as it happens, in which a vowel is followed by more consonants than three. In the same number of syllables (one hundred and twenty lines) taken in the same manner from various poems of Keats, — not an unmelodious writer, — there are one hundred and sixty-eight in which a vowel is followed by three consonant sounds, twenty-seven in which a vowel is followed by four consonant sounds, and one vowel followed by five consonants. Combinations of three or more consonants, then, are about seven times as frequent in English as in Greek; while sets of four consonants, rare in Greek, and sets of five, probably unknown in Greek, are so common as to cause no difficulty to

our organs of speech. Such combinations have been rendered easy by incessant practice from babyhood, just as scores, perhaps thousands, of modern pianists glide easily over passages which no one in the world two centuries ago could possibly have played.

One other principle is of great importance. The tendency toward rhythm in speech is so strong that the voice will rhythmize just as completely as possible the material supplied to it. And the lowest unit of rhythm practically recognized by the voice is not the single vowel or consonant, as is usually assumed, but the syllable, the next unit being the foot, as before defined. If possible, without too great sacrifice of other qualities demanded by the mind, the voice will gratify the ear by so hurrying over or delaying upon the individual sounds as first to make the feet equal, and, secondly, to make the constituent syllables bear similar relations to each other in the separate feet. In children the mind does not demand much regard to sense, while the ear is delighted with a rather monotonous rhythm ; hence it is that children recite simple verses with a certain kind of rhythmical perfection which, in them, is charming. Mental growth modifies without destroying this universal tendency. The foot and syllable remain the lowest units. Accordingly, a syllable containing six consonants, like *strengths*, — to which, indeed, we generally give seven consonants by inserting a *k* sound after *ng*, — may, in connected discourse, take no more time than one containing a vowel of equal length, and four, three, or two of the same consonants, as *string*, *sinks*, *ring*.

All statements of quantitative laws in English must take account of locality in the foot, and relations to other parts of the foot; and also, as involved in this, whether the measure is in $\frac{3}{8}$ or $\frac{2}{4}$ time. The thesis, being fixed by the position of the principal word-accents, may be assumed as known. Taking into consideration these elements, tentative and partial statements of laws may be put in the following form.

A. In triple time.

1. The thesis becomes a triseme if the next syllable bears the ictus. No syllable can be placed in this position which is

incapable of such prolongation. Sweet, in saying that "short accented monosyllables [or accented final syllables] do not exist in English," leaves out of view the difference between detached words and connected speech; the law holds only for certain connections.

2. If the arsis is monosyllabic, a short vowel in thesis followed by a single consonant is not lengthened by the ictus; the arsis is prolonged instead, giving the frequent inverted trochee (⏑ –). Many vowels and diphthongs usually considered long are really short in thesis followed by monosyllabic arsis. Thus: —

> "Come from the *dying* moon, and blow."
> "A *bower quiet* for us and a sleep."

There seems to be a strong tendency in our present pronunciation — stronger in some speakers than in others — towards shortening syllables in thesis, unless prevented by somewhat difficult consonants. Unemphatic *the* in thesis is always short, as in Matthew Arnold's fine line, —

> "From the intense, clear, star-sown vault of heaven,
> *Over the lit sea's unquiet way.*"

3. Otherwise, with monosyllabic arsis, either vocalic or consonantal element of thesis, or both together, permit or require the thesis to be long.

4. On the other hand, with arsis dissyllabic, the strong tendency is to make the thesis short, filling the measure thus with three equal notes. But rhetorical emphasis, or a long set of consonants, or a diphthong followed by consonants not easily compressible, lengthens a syllable which would be long before a monosyllabic arsis, so as to produce a cyclic dactyl or a dactyl of the form – ω.

5. A monosyllabic arsis preceded by a short thesis always becomes long, often by prolongation of a syllable of such a character that in thesis it could not be long.

6. A monosyllabic arsis after a long thesis is short if possible, otherwise irrational. The same is true of a monosyllabic anacrusis. Rhetorical emphasis or a word-accent in arsis tends to lengthen it.

7. In a dissyllabic arsis both syllables are short, if possible; the lengthening of either by word-accent, or emphasis, or consonantal difficulties, is resisted, and felt as a ritardando.

B. When these statements are applied to $\frac{3}{4}$ time they require modification by the observance of two principles. First, the rhythmizing instinct, striving to maintain double time, here favors equality of adjacent syllables, in certain situations, as strongly as in triple time it favors their inequality. Again, the influence of the secondary ictus, usually occurring on the third quarter of the foot, is similar to that of the primary ictus, though weaker. Accordingly, —

1. The thesis extends to a half-note, or tetraseme, if the next syllable bears a primary accent; it becomes an ordinary long if the next syllable bears the secondary ictus. The tetraseme is far less frequent in $\frac{3}{4}$ rhythm than the triseme in $\frac{3}{4}$.

2. The secondary ictus lengthens a syllable if the next syllable has the primary ictus. Whether a given ictus is primary or secondary must frequently be determined by the degree of emphasis upon it, sometimes by the length of the line.

3. A primary or secondary thesis — if we may thus extend the meaning of that term — is made short, if possible, when followed by a primary or secondary arsis.

4. A monosyllabic primary thesis becomes a triseme if the next syllable has the primary ictus.

5. Of two successive syllables without ictus, the former is long and the latter short. This gives the form ⏑ — ⏑ with no secondary ictus.

6. Owing, however, to the greater frequency of triple rhythm, the two-timed trochee or tribrach is read, as was said before, whenever a fairly good excuse is given.

A number of questions which arise in connection with the subject have not been touched upon, or have been only touched upon. The precise determination of the dividing line between syllables of the same word; the relation between metrical ictus, word-accent, and rhetorical emphasis; the relation between the rhythm of prose and that of verse; —

these and other topics would demand more attention if our limits permitted. The employment of the rest or pause within the line has not been dwelt upon, because only when the rest takes the place of an ictus does it become prominent. Doubtless, in a number of the lines noted above many readers would insert pauses where the schemes here given assume prolongation of the syllable. The difference is trifling, and often is only apparent. Frequently a final consonant is prolonged unconsciously to the speaker himself, and this long consonant fills out the time. But when real, this pause in the arsis is not usually measured by the ear; only in rare instances does it play any important part in the construction of the rhythm. The vacant thesis, of course, is a different thing, but is not common, and has therefore been left out of view, since only an outline has been attempted. In general, also, it should be observed that individual differences in ways of reading a considerable number of words or lines do not in the least affect the correctness of the principles and views here set forth. That there is a substantial agreement among all readers, and that such schemes as are here given represent that agreement with substantial accuracy, is beyond question. True, if one has no ear for musical rhythm and no knowledge of music, and at the same time has never been trained to read even the classic hexameter quantitatively, he may be unable to detect and describe the rhythm of his own or another's reading. And yet, even in such a person's reading, every listener whose consciousness of rhythm has been developed, musically or otherwise, detects at once the same inevitable, however unconscious, observance of time.

VI. — *Equestrianism in the Doloneia.*

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Victor Hehn (Kulturpflanzen und Hausthiere,[8] p. 20 ff.) traces the horse to an original home in the great plateau of Central Asia. Thence have come the great equestrian marauders of the Scythian stock, — Mongols, Huns, and Turks, — races of historic centaurs. But this blending of rider and horse into one creature was the peculiar achievement of those tribes which remained longest in the region where the wild horse was native. The earlier Indo-Europeans who moved westward from some part of this same vast region were not equestrian. They knew the horse as the "swift one," but probably still wild. From their successors and kinsfolk on the great Iranian table-lands they afterwards received the tamed horse and the art of riding ; and even before this some of them had borrowed, directly or indirectly, from the civilization of the Euphrates valley the highly developed and artificial use of the war-horse and chariot.

In the Homeric poems, at any rate, as is well known, the horse is a war animal, and driven to the war chariot even by the Greeks in a manner purely Oriental (cf. Eyssenhardt, Fleckeisen's Jahrbücher, CIX. p. 599 f.). There is no fighting on horseback. Ordinary riding is not even mentioned, either in peace or war. In *O* 679 ff., Aias, leaping from ship to ship, is compared to a professional performer on horseback, — *ἀνὴρ ἵπποισι κελητίζειν εὖ εἰδώς*, — whose feat consisted in leaping from back to back of four horses harnessed abreast, and running at full speed. In *ε* 370 ff., when his raft goes to pieces, Odysseus bestrides a piece of the wreck as if riding a race-horse, — *κέλητθ' ὡς ἵππον ἐλαύνων*, — and prepares himself for a long swim. Here too professional riding at the games is clearly meant; and both similes, as Nitzsch held, involve features of the poet's own period, rather than

those which had been transmitted to him by oral tradition from the heroic period. So Schol. A (Aristarchos) on the first passage: *κέλητα αὐτὸς μὲν οἶδε, χρωμένους δὲ τοὺς ἥρωας οὐ συνίστησιν.* Eustathios, on the same passage, argues against the charge of anachronism: *οὐ γάρ φησιν ὁ ποιητὴς ὡς ἐπὶ τῶν Ἀχαιῶν ἦν τὸ πρᾶγμα, ἀλλ' αὐτὸς εἰδὼς τοῦτο ἐφ' ἑαυτοῦ γινόμενον ἐντεῦθεν ποιεῖται τὴν παραβολὴν ὡς πρὸς εἰδότας λαλῶν. οὕτω δὲ καὶ ἐν Ὀδυσσείᾳ μέμνηται κέλητος.* The Schol. on the second passage refers to the only other place in Homer where riding is mentioned, and the only one where a hero rides: *οἶδε μὲν ὁ ποιητὴς τὸν κέλητα, οὐκ εἰσάγει δὲ τοὺς ἥρωας αὐτῷ χρωμένους, εἰ μὴ ἐξ ἀνάγκης ἐν τῇ Δολωνείᾳ τὸν Διομήδην.*

That Diomedes at least, if not Odysseus also, rode the horses of Rhesos back to the Greek camp, has been the almost unanimous view of commentators on the Doloneia. But the last edition of Liddell and Scott's Lexicon, *s. v.* *ἵππος*, to the citation of *K* 513 and 529, as instances of the plural *ἵπποι* meaning *chariot*, adds this parenthesis: "for a careful reading of the whole passage shows that Diomed and Ulysses were *driving the chariot* of Rhesus, not *riding his horses.*" As a "careful reading of the whole passage" does not show this to me, and as the manner in which the Greek heroes brought their prize back to camp is quite differently described even by those who do not include the chariot in the robbery, I wish to review the episode to see what interpretations the probabilities favor. That it remains, in part at least, a question of probabilities, is due to the fact that the Doloneia abounds in abrupt transitions and incomplete descriptions, at great variance with the usual epic minuteness (cf. Düntzer, Philol., XII. p. 537).

Diomedes and Odysseus set out toward the Trojan camp just before dawn (v. 251), in the third part of the night (253), lightly armed. Meanwhile Dolon, a Trojan, starts off to spy out the Greek camp, after asking Hector to promise him (322 f.):

> *ἦ μὲν τοὺς ἵππους τε καὶ ἅρματα ποικίλα χαλκῷ*
> *δωσέμεν, οἳ φορέουσιν ἀμύμονα Πηλεΐωνα.*

Hector takes formal oath (330 f.):

> μὴ μὲν τοῖς ἵπποισιν ἀνὴρ ἐποχήσεται ἄλλος
> Τρώων, ἀλλά σέ φημι διαμπερὲς ἀγλαϊεῖσθαι.

But Dolon is captured by Diomedes and Odysseus, to whom he claims that Hector had prevailed upon him to go out as a spy (392 f.):

> ὅς μοι Πηλεΐωνος ἀγαυοῦ μώνυχας ἵππους
> δωσέμεναι κατένευσε καὶ ἅρματα ποικίλα χαλκῷ.

Odysseus smiles, and says (401 ff.):

> ἦ ῥά νύ τοι μεγάλων δώρων ἐπεμαίετο θυμός,
> ἵππων Αἰακίδαο δαΐφρονος· οἱ δ' ἀλεγεινοὶ
> ἀνδράσι γε θνητοῖσι δαμήμεναι ἠδ' ὀχέεσθαι,
> ἄλλῳ γ' ἢ Ἀχιλῆι, τὸν ἀθανάτη τέκε μήτηρ.

Odysseus then asks where Hector is (406 f.):

> ποῦ νῦν δεῦρο κιὼν λίπες Ἕκτορα, ποιμένα λαῶν;
> ποῦ δέ οἱ ἔντεα κεῖται ἀρήϊα, ποῦ δέ οἱ ἵπποι;

The frightened Dolon gives the fullest information about the Trojan camp, and directs the Greek heroes against the Thracians, who are just arrived, and are nearest the Greek camp:

> Θρῆικες οἵδ' ἀπάνευθε νεήλυδες, ἔσχατοι ἄλλων·
> (435) ἐν δέ σφιν Ῥῆσος βασιλεύς, παῖς Ἠιονῆος.
> τοῦ δὴ καλλίστους ἵππους ἴδον ἠδὲ μεγίστους·
> λευκότεροι χιόνος, θείειν δ' ἀνέμοισιν ὁμοῖοι.
> ἅρμα δέ οἱ χρυσῷ τε καὶ ἀργύρῳ εὖ ἤσκηται·
> τεύχεα δὲ χρύσεια πελώρια, θαῦμα ἰδέσθαι,
> (440) ἤλυθ' ἔχων· τὰ μὲν οὔ τι καταθνητοῖσι ἔοικεν
> ἄνδρεσσιν φορέειν, ἀλλ' ἀθανάτοισι θεοῖσιν.

After giving this treacherous information, Dolon is slain by Diomedes, and his equipments vowed to Athene by Odysseus. To the vow is added the prayer (464):

> πέμψον ἐπὶ Θρηκῶν ἀνδρῶν ἵππους τε καὶ εὐνάς.

After hiding the trophies taken from the Trojan, the two Greeks proceed to the bivouac of the Thracians:

> οἱ δ' εὗδον καμάτῳ ἀδηκότες, ἔντεα δέ σφιν
> καλὰ παρ' αὐτοῖσι χθονὶ κέκλιτο, εὖ κατὰ κόσμον,
> τριστοιχί· παρὰ δέ σφιν ἑκάστῳ δίζυγες ἵπποι.
> Ῥῆσος δ' ἐν μέσῳ εὗδε, παρ' αὐτῷ δ' ὠκέες ἵπποι

(475) ἐξ ἐπιδιφριάδος πυμάτης ἱμᾶσι δέδεντο.
τὸν δ' Ὀδυσεὺς προπάροιθεν ἰδὼν Διομήδεϊ δεῖξεν·
οὗτός τοι, Διόμηδες, ἀνήρ, οὗτοι δέ τοι ἵπποι,
οὓς νῶϊν πίφαυσκε Δόλων, ὃν ἐπέφνομεν ἡμεῖς.
ἀλλ' ἄγε δή, πρόφερε κρατερὸν μένος· οὐδέ τί σε χρὴ
(480) ἑστάμεναι μέλεον σὺν τεύχεσιν, ἀλλὰ λύ' ἵππους·
ἠὲ σύ γ' ἄνδρας ἔναιρε, μελήσουσιν δ' ἐμοὶ ἵπποι.

Diomedes begins to slay the prostrate Thracians, and as fast as he kills a man, Odysseus seizes the body by the foot and drags it away,

τὰ φρονέων κατὰ θυμόν, ὅπως καλλίτριχες ἵπποι
ῥεῖα διέλθοιεν, μηδὲ τρομεοίατο θυμῷ
νεκροῖς ἀμβαίνοντες· ἀήθεσσον γὰρ ἔτ' αὐτῶν. (491 ff.)

Twelve Thracians are slain and dragged away, and Diomedes then kills the king himself:

τόφρα δ' ἄρ ὁ τλήμων Ὀδυσεὺς λύε μώνυχας ἵππους,
σὺν δ' ἤειρεν ἱμᾶσι, καὶ ἐξήλαυνεν ὁμίλου
(500) τόξῳ ἐπιπλήσσων, ἐπεὶ οὐ μάστιγα φαεινὴν
ποικίλου ἐκ δίφροιο νοήσατο χερσὶν ἑλέσθαι.
ῥοίζησεν δ' ἄρα πιφαύσκων Διομήδεϊ δίῳ.
αὐτὰρ ὁ μερμήριζε μένων ὅ τι κύντατον ἔρδοι,
ἢ ὅ γε δίφρον ἑλών, ὅθι ποίκιλα τεύχε' ἔκειτο,
(505) ῥυμοῦ ἐξερύσοι ἢ ἐκφέροι ὑψόσ' ἀείρας,
ἢ ἔτι τῶν πλείωνων Θρηκῶν ἀπὸ θυμὸν ἕλοιτο.
εἷος ὁ ταῦθ' ὥρμαινε κατὰ φρένα, τόφρα δ' Ἀθήνη
ἐγγύθεν ἱσταμένη προσέφη Διομήδεα δῖον·
νόστου δὴ μνῆσαι, μεγαθύμου Τυδέος υἱέ,
(510) νῆας ἔπι γλαφυράς, μὴ καὶ πεφοβημένος ἔλθῃς,
μή πού τις καὶ Τρῶας ἐγείρῃσιν θεὸς ἄλλος.
ὣς φάθ', ὁ δὲ ξυνέηκε θεᾶς ὄπα φωνησάσης,
καρπαλίμως δ' ἵππων ἐπεβήσετο· κόψε δ' Ὀδυσσεὺς
τόξῳ, τοὶ δ' ἐπέτοντο θοὰς ἐπὶ νῆας Ἀχαιῶν.

Apollo rouses the Thracians. A kinsman of Rhesos, on springing up from sleep, noticed first of all *χῶρον ἐρῆμον ὅθ' ἕστασαν ὠκέες ἵπποι,* and then the dead forms of his comrades (519 ff.).

Diomedes and Odysseus come back to the spot where they had slain Dolon.

ἔνθ' Ὀδυσεὺς μὲν ἔρυξε διφίλος ὠκέας ἵππους,
Τυδεΐδης δὲ χαμᾶζε θορὼν ἔναρα βροτόεντα
ἐν χείρεσσ' Ὀδυσῆϊ τίθει, ἐπεβήσετο δ' ἵππων.
(530) μάστιξεν δ' ἵππους, τὼ δ' οὐκ ἀέκοντε πετέσθην
νῆας ἔπι γλαφυράς· τῇ γὰρ φίλον ἔπλετο θυμῷ

Nestor, in the expectant group of chiefs before the moat of the Greek camp, hears the sound of horses' feet, and prays that Diomedes and Odysseus may be coming safely back.

> οὔ πω πᾶν εἴρητο ἔπος, ὅτ' ἄρ ἤλυθον αὐτοί.
> καὶ ῥ' οἱ μὲν κατέβησαν ἐπὶ χθόνα, τοὶ δὲ χαρέντες
> δεξιῇ ἡσπάζοντο ἔπεσσί τε μειλιχίοισιν. (540 ff.)

Nestor's first question is, not what news they had brought from the Trojan camp, but (545 ff.):

> ὄππως τούσδ' ἵππους λάβετον· καταδύντες ὅμιλον
> Τρώων; ἦ τίς σφωε πόρεν θεὸς ἀντιβολήσας;
> αἰνῶς ἀκτίνεσσιν ἐοίκοτες ἠελίοιο.

He had always fought with the Trojans,

> ἀλλ' οὔ πω τοίους ἵππους ἴδον οὐδὲ νόησα. (550 ff.)

Surely some god must have given them. Odysseus replies (556 ff.):

> ῥεῖα θεὸς γ' ἐθέλων καὶ ἀμείνονας, ἠέ περ οἶδε,
> ἵππους δωρήσαιτ', ἐπεὶ ἦ πολὺ φέρτεροί εἰσιν.
> ἵπποι δ' οἶδε, γεραιέ, νεήλυδες, οὓς ἐρεείνεις,
> Θρῆκιοι.

Their master had been slain by Diomedes, with twelve of his companions, besides a spy of the Trojans.

> ὣς εἰπὼν τάφροιο διήλασε μώνυχας ἵππους
> (565) καγχαλόων· ἅμα δ' ἄλλοι ἴσαν χαίροντες Ἀχαιοί.
> οἱ δ' ὅτε Τυδεΐδεω κλισίην ἐύτυκτον ἵκοντο,
> ἵππους μὲν κατέδησαν ἐυτμήτοισιν ἱμᾶσιν
> φάτνῃ ἐφ' ἱππείῃ, ὅθι περ Διομήδεος ἵπποι
> ἕστασαν ὠκύποδες μελιηδέα πυρὸν ἔδοντες,
> (570) νηὶ δ' ἐνὶ πρυμνῇ ἔναρα βροτόεντα Δόλωνος
> θῆκ' Ὀδυσεύς, ὄφρ' ἱρὸν ἑτοιμασσαίατ' Ἀθήνῃ.

These are all the passages which can in any way bear on the question under discussion. The facts in Dolon's story about the Thracians (434 ff.), which the poet evidently means to have alluring, are that they were newly arrived, and so strangers to the battle-field, that they were nearest the Greeks, and that their king had wonderful horses, a wonderful chariot, and armor more fit for gods than men. Of the armor no further mention is made, except that it lay on the chariot (504). That it would have been considered a great

prize may be inferred from the questions put to Dolon when the Greek spies still thought of seizing Hector (406 f.; cf. 206, and [Eur.] Rhes. 574 ff.). To the chariot certain reference is made in three places, verses 475, 501, and 504 f. In the first, the horses are described as haltered *ἐξ ἐπιδιφριάδος πυμάτης*. The *ἅπαξ λεγόμενον* of this phrase is explained by Schol. A as *τῆς κατὰ κόσμον ἄκρας ἄντυγος ἢ τοῦ ἐν τάξει ἐξωτάτου ξύλου, ἐφ' οὗ πρῶτοι ἀναβαίνουσιν οἱ μέλλοντες μάχεσθαι.* Schol. BL gives the second alternative only: *ἐπιδιφριὰς μέρος τοῦ δίφρου καθ' ὃ ἐπιβαίνειν εἰώθασιν.* These explanations clearly apply to the substantive as modified by the partitive adjective *πυμάτης*, and we may safely take refuge from the varying views of lexicons and commentators in the opinion of Helbig (Das Homerische Epos, etc., p. 90), that *ἐπιδιφριάς* denoted the whole balustrade or fence of the chariot box, of which the *ἄντυξ* was the upper rail. The horses, then, had been unyoked from the pole, and hitched to the rear of the chariot, where the *ἄντυξ* was inserted in the floor of the chariot box.[1]

In 501 Odysseus is said to have forgotten to take the goad from the chariot when he untied the horses, and in 504 f. Diomedes thinks of stealing the chariot by dragging or carrying it away. In this last passage only does it appear that Dolon's description of the splendor of the chariot and arms of Rhesos (438 ff.) had inflamed the cupidity of the Greeks at all. Their ambition was centred on the horses as the chief prize, unless the indefinite *ἵππους* of 464 can be said to include the *ἅρμα*. There is no exultation at the Greek camp over either chariot or armor (567 ff.). If they were taken too, they are completely ignored by the poet in the triumph at the capture of the snow-white wind-swift horses.

The only phrase of the poet which in any way leads us to think of the chariot as taken too, is the *ἵππων ἐπεβήσετο* of 513 and 529. Elsewhere in Homer this phrase is used of mounting to the chariot behind the horses. The plural sub-

[1] Cf. [Eur.] Rhes. 567 f.:

> ΔΙ. *οὔκ, ἀλλὰ δεσμὰ πωλικῶν ἐξ ἀντύγων*
> *κλάζει σιδήρου.*

stantive for one part of the team (or "rig," as they say west of the Hudson) had come to include by metonymy the whole, and at last to designate the other part. The original and both derived uses can be instanced in the above citations from the Doloneia, though the original use is far more frequent. It was no less a scholar than Welcker who first disputed (Ep. Cyc., II. p. 217) the inference of Wolf and others that the Doloneia afforded the solitary instance of actual non-professional riding in Homer. His note on the subject is as follows: "Diomedes, da ihm Athene wiederrieth mehrere zu töden, that denn natürlich das Andere woran er gedacht hatte (503 ff.), er zog den Wagen heraus und spannte die Rosse daran; sonst musste er ja auch neben den fliegenden Rossen hergelaufen sein (527). Nein, erst fuhr Odysseus und Diomedes hielt die Beute, dann wechselten sie die Rolle. So ist ἵππων ἐπεβήσετο vom Wagen zu verstehen wie immer," etc. The Anhang to the Ameis-Henze Iliad (*K* 513) mentions only two scholars who have adopted this view of Welcker, — Sickel, in an essay inaccessible to me, and Döderlein, in his note on 513. Aside from these, the Scholiasts, Eustathios, and all the commentators whom I have been able to consult, interpret the passage as Wolf did (Proleg., p. 80). Assuming, in ignorance of other literature in English on the subject, that Liddell and Scott's Lexicon reverts in its last edition to the view of Welcker, it will be worth while to reproduce here the convincing arguments of H. Düntzer (Philol., XII. p. 54 f.) against that view, and to add to them one or two fresh arguments suggested by this review of the whole episode.

In the first place, Welcker was evidently led to dispute the current view by the fact that ἵππων ἐπεβήσετο everywhere else in Homer described mounting the war chariot. But the force of this consideration is greatly weakened by the fact that, since this is the only place in Homer where mounting on horseback is described at all, we cannot tell what other expression for it than the one here used stood at the poet's command. The words in themselves are certainly capable of the meaning "mounted the horses," by a mere recession from

a bold metonymical use of the substantive to the original meaning. Eyssenhardt (*l. c.*, p. 598) argues, from this very use of the stock phrase for mounting the chariot, that the art of riding was unknown even to the author of the later Doloneia, as well as in the heroic times which he portrays. (So Monro, in his excellent note on *K* 513.) What Eyssenhardt most objects to is the plural substantive *ἵππων*: "Denn es ist unmöglich dass ein Dichter, der die Kunst des Reitens aus eigener Anschauung kannte, einen Reiter statt auf sein Pferd und von seinem Pferde, vielmehr auf zwei und von zweien, sein eigenes und das seines Gefährten, steigen, oder gar den einen Reiter beide Pferde schlagen lässt." But this surely allows too little elasticity to a word already boldly diverted from its original meaning, and forgets also that the horses are described as fastened together into a pair or "team," just as if a chariot were behind them (499). To describe a man's mounting one of the horses thus fastened together, the New-Englander can certainly say "he mounted the team," even though the word "team" often includes vehicle. So much for the phrase *ἵππων ἐπεβήσετο*. The original meaning of *ἵππων*, and the fact that the serio-comic return of the Greek heroes to camp involves the poet in a description of that for which there was no well-established phraseology, amply justifies the somewhat forcible appropriation of a stock phrase current in another sense than the exact one here needed.

Again, Welcker's interpretation of the dilemma of Diomedes and its solution by Athene is certainly wrong. After a pathway up to the sleeping king and his chariot and horses has been made by the heroes, Diomedes slays the king, while Odysseus unfastens the horses from the chariot box, ties them together with their fastenings, and begins to drive them out through the bloody lane. Then he signals Diomedes to follow (cf. Schol. BL at 502: *οὐ γὰρ συμπαρεῖναι αὐτῷ ἐδύνατο, ἐλάσας πόρρω τοὺς ἵππους*). To the cool shrewdness of Odysseus is well assigned the decision that daring had gone its full length, and would become folly if persisted in. But Diomedes, in the inner circle of the Thracian bivouac

(474), was deliberating (the impf. *μερμήριζε* instead of the formulaic aorist is worth noting) what rashest deed he could do (503), not whether he should continue or cease his rashness. He hesitates between killing more Thracians and stealing the chariot of Rhesos in one of two ways. But either exploit would be rash, for it would take time, and the dawn was near. There is no contrast in risk, then, between these projects. As Schol. BL says: *οὐδὲν τούτων ἀκίνδυνον ἦν σωθῆναι αὐτόν* (cf. Eust. *τούτων δὲ οὐδέτερον τοῖς κατασκόποις συνέφερε διὰ τὸ ἤδη περατοῦσθαι τὴν νύκτα*). The alternative of total opposition, like the second in the mind of Achilles in *A* 192, is presented to the mind of Diomedes by the signal of Odysseus for return. With the poet's usual happy personification, the force of this wise suggestion is seconded by Athene's admonition, "Bethink thee of return" (509). She does not dissuade him from killing more Thracians only, as Welcker put it, but also and just as much from stealing the chariot. Düntzer has pointed out other weak points in Welcker's version of the episode, which need not now be dwelt upon.

It is, of course, often impossible to tell, in the case of a legend which successive poets treat with different details, whether those details are successive elaborations of the legend, or selected features which lay at the disposal of all the poets alike. In view of the exceedingly concentrated scope of the Doloneia, — the narration of a nocturnal raid on a hostile camp, — it would not be wise to suppose that the poet was acquainted with none of the details of the story of Rhesos which appear in Pindar, [Euripides,] Vergil, and Ovid. While, therefore, a disagreement between the oldest poet and the later ones in this matter of the theft of the chariot of Rhesos could not be called a conclusive argument against the current interpretation of the verses just discussed, a striking agreement between them would certainly have corroborative force. The author of the Rhesos agrees with that of the Doloneia in representing the horses of Rhesos to be valuable to the Greeks simply as booty, and not for the averting of any oracular evil, as in Vergil (Aen. i. 469 ff.; cf. Servius

ad loc.), and also in having the horses stolen without the chariot.[1]

Amid noticeable variations from the Doloneia and the Rhesos in Vergil, there is plain agreement in this, that the horses only are stolen. Ovid alone—in the speech of Ulysses for the armor of Achilles, where other familiar Homeric episodes, as well as other parts of this, are freely distorted—thinks of the chariot of Rhesus as stolen.[2]

It is reasonably certain, then, that the poet of the Doloneia does not represent the Greek heroes as bringing the chariot of Rhesos back to camp, but only the horses; and that Diomedes, at least, rode one of the horses which Odysseus had harnessed together. But it is not anywhere expressly stated that Odysseus too mounted one of the horses. We are left to infer this from v. 541, where both heroes are said to have dismounted. This verse was singularly disregarded by many of the older commentators, who had Odysseus run after the

[1] This is especially plain from a comparison of Athene's inciting speech to the Greek heroes (Rhes. 616 ff.) with the story of the king's charioteer, vv. 780–798. In both passages ὄχημα πωλικόν refers to the horses exclusive of the chariot,—an exact reversal of the metonymy by which ἵπποι in Homer means the chariot to the exclusion of the horses. This meaning for ὄχημα πωλικόν is recognized in the Thesauros for 621, and is paralleled there by Hippol. 1355, Ion 1151, Frag. 779 6 (Dind.). It is equally clear for 797, as the context shows, although so great a man as Scaliger was of a different opinion. Heath's note *ad loc.* is (I quote from the letter of a friend): "Haec ita accipit Scaliger ad Culicem v. 326 quasi currus cum equis fuisset abductus. At ex v. 615, vv. 671 (i. e. 621, 671), equos tantum abductos patet, et ὄχημα ἵππων nihil aliud quam ἵπποι, ut ὄχημα κανθάρου Aristoph. Pac. 865 ipse κάνθαρος." Eyssenhardt, *l. c.*, p. 598, shows the same misinterpretation of the verse as Scaliger, when he bases on it the statement, "Euripides umgeht die Schwierigkeit dadurch dass er die Räuber 'das Fuhrwerk' stehlen lässt."

[2] Verg., Aen. i. 469 ff.:

Nec procul hinc Rhesi niveis tentoria velis
Agnoscit lacrimans, primo quae prodita somno
Tydides multa vastabat caede cruentus
Ardentesque avertit equos in castra, priusquam
Pabula gustassent Trojae Xanthumque bibissent.

Ovid, Met. xiii. 250 ff.:

Inque suis ipsum castris comitesque peremi
Atque ita captivo victor votisque potitus
Ingredior curru laetos imitante triumphos.
Cujus equos pretium pro nocte poposcerat hostis,
Arma negate mihi, fueritque benignior Ajax.

horses as he drove them toward camp. So Eustathios in commenting on ε 371. He changed his view very positively, however, when he afterwards came to comment more particularly on the whole episode of the Doloneia, and made Odysseus share in the equestrianism. Curiously enough, Nitzsch, in his note on ε 371, presents this earlier and partial view of Eustathios.[1]

As to the point in the narrative where we are to understand that Odysseus mounted one of the horses, commentators are about evenly divided between v. 499 and v. 513. Eustathios, with all the material at his command, including the original sources of both bodies of scholia on the Iliad, makes Odysseus mount at 513, following the example of Diomedes. Monro and Ameis-Henze, which perhaps represent the best English and German school editions, make Odysseus set the example to Diomedes by mounting at 499. No very conclusive arguments can be urged for either view. I think one moves along the line of least resistance in following Eustathios, and understanding that Odysseus mounts at 513, after Diomedes. Here is the first mention of any mounting at all. Here, then, would most easily fall out any express mention of Odysseus's mounting. Diomedes was the horseman of the two heroes. The tact of Odysseus in fastening the horses together as they were accustomed to travel is noted by a Scholiast as something remarkable,[2] and it would be more natural for the hero who owned and used horses to suggest the strange expedient of mounting. So far too as the usage of the verbs ἐπιπλήσσω and κόπτω in Homer shows any distinction, a different position for Odysseus in v. 499 f. and v. 513 is favored; in the first instance, behind the horses, where their charioteer was accustomed to be with the μάστιξ; in the second, over them. The use of μάστιξεν in v. 530 is plainly due to the thoughtless improvement of a formulaic verse; no more thoughtless or inexact, however, than v. 531, which editors bracket.

[1] "Nur in besonderem Falle setzt sich Diomedes auf eines der erbeuteten Pferde, die dann Odysseus zum Lager treibt."

[2] Schol. BL: καὶ ἔστι μὲν νησιώτης, τῇ δὲ πείρᾳ οὐ δευτερεύει τινός. Cf. Rhes. 624 ff.

Regarding as certain, then, only the view that the poet does not represent the Greek heroes as stealing the chariot of Rhesos as well as his horses, and as merely more probable the interpretation given of vv. 499 and 513, the culmination of the exploit of Diomedes and Odysseus, which is left so vague in many details by the poet of the Doloneia, may be briefly described as follows. While Diomedes seeks and slays Rhesos, Odysseus unties the horses from the chariot box, couples them together with their halter straps, and starts to drive them with extemporized reins and goad down through the ranks of sleeping Thracians. At the same time he signals Diomedes to join him. After an instant's deliberation Diomedes does so, and leaps upon one of the horses. Odysseus follows suit, still keeping reins and goad (bow), and sends the horses at full speed toward the Greek camp. Arrived at the place where the spoils of Dolon had been hid, Odysseus reined in the horses, Diomedes leaped to the ground, handed the trophies up to Odysseus, and then remounted. In the eager haste of the narrative, it is not necessary to say that Diomedes relieved Odysseus of the trophies after remounting, even if we assume that he did so. They would be no special burden (cf. 458 ff.) to a horseman riding for dear life in dare-devil bare-back style. After both heroes have dismounted and received the congratulations of their friends, Odysseus drives the horses into camp, as he started to drive them at first out through the ranks of the Thracians. At the stables of Diomedes, the extemporized harness is converted back into halters. Then the heroes bathe and feast.

VII. — *The Value of the Attic Talent in Modern Money.*

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THIS investigation is confined to determining the value which the weight of silver known as the Solonic talent in ancient Athens would have at the present day in the money of England and of the United States, no reference being made to the different purchasing power of this amount of silver in ancient and modern times. In Smith's Dictionary of Greek and Roman Antiquities (p. 1237) the value of the Solonic talent is given as £243 15*s.*, and that of the drachma as $9\frac{3}{4}$*d.* This is generally accepted as the correct value in England, and a corresponding value of $1,200 is usually adopted in the United States. No suspicion of the correctness of these estimates appears to have been excited by Boeckh's elaborate calculations, which give the Attic talent the value of 1,500 Prussian thalers, or about £220.[1] Nor did it cause any surprise that Smith's estimate of the talent was based upon a value of about 72 pence per ounce Troy for pure silver, or $66\frac{6}{10}$ pence per ounce for English standard silver. If $1,200 really represented the value of the talent in U. S. gold, on the basis assumed by Smith, our "standard" silver dollar of 412.5 grains might be reduced to $363\frac{1}{3}$ grains (with 327 grains of pure silver) and even then be an honest dollar![2]

It is obvious that there must be some error in calculations which lead to such inconsistencies. It is very easy to estimate the value of the Solonic talent in English money and in U. S. money. It is now well established that the Athenians coined their silver pure,[3] so that the weight of an Attic coin must be

[1] See Boeckh's Staatshaushaltung der Athener, I. p. 25 (ed. of 1851); Lamb's translation, p. 27.

[2] ...al-tender silver dollar of the United States contains 90 per cent of

[3] ...h, Griech. u. Rom. Metrologie, pp. 232–234 (2d ed.).

compared only with the weight of *pure* silver in modern coins which are of full weight. The best specimens of the Attic coinage give a weight of 4.366 grammes (67.38+ grains Troy) for the drachma.[1] The talent, which was of the weight and value of 6,000 drachmas, therefore weighed about 404,283 grains Troy, or $57\frac{3}{4}$ pounds avoirdupois. When English standard silver, which is $\frac{925}{1000}$ fine, was worth $52\frac{7}{10}$ pence per ounce Troy, so that pure silver was worth 57 pence, the talent (= 842.26 oz. Troy) would have been worth almost exactly £200, or about $975. If we divide the 404,283 grains in a talent by 371.25, the number of grains in a "standard" silver dollar of the United States, we find that a talent of silver could be coined into more than 1,088 of these depreciated dollars, which, however, would be worth less than a thousand honest dollars of full weight. A few years ago the value of silver assumed above ($52\frac{7}{10}$*d.*) was not too high; but within the past year a decline of more than ten per cent in the price has occurred, so that the value of the Attic talent in 1885 would be only about £180, or $877.50.[2] These comparisons of the Attic talent with a fluctuating commodity like silver at the present day are, of course, highly unsatisfactory; but there can be no better way of showing the value of a certain weight of any metal than to state its market value at a given time or at various times. To state the modern value of the amount of gold which was the ancient equivalent in value of the Attic silver talent (about £357) would be absolutely misleading, as the ratio of gold to silver in ancient Greece was generally 10 : 1, so that the gold stater of Athens ($\frac{1}{3000}$ of a gold talent in weight) had the same weight as the two-drachma piece in silver, but was of ten times its value. See Xen. Anab. I. 7. 18, where Cyrus pays a bet of ten talents (60,000 silver drachmas) with 3,000 gold staters or darics. In stating the value of the talent in books of reference, the only practical

[1] Hultsch, p. 210.

[2] In May, 1886, the price of silver in London has fallen to 45 pence per ounce, which gives the talent a value of £170 15*s.* 6*d.*, or about $832.50. A comparison of this last amount with $1,088 is instructive, showing the depreciation of the U. S. silver dollar at the present date.

course is to assume an average price of silver bullion as a basis, and to fix the value of the talent accordingly. The basis of $52\frac{7}{10}d.$ per ounce, assumed above, is a fair average for the last quarter of a century, and we are therefore justified in stating the value of the Solonic talent as about £200, or $1,000, always remembering that the talent represents a fixed weight of a commodity which is now constantly fluctuating in value.

The cause of the great discrepancy between this estimate and that of £243 15*s.* in Smith's Dictionary of Antiquities is not far to seek. In the article *Drachma*, the weight of the Solonic drachma is given as 65.4 grains; and this is divided by the weight of *pure* silver in the English shilling (80.7 grains) to get the value of the drachma in English money. This value thus appears to be 9.72 pence, and the talent (6,000 drachmas) so appears to be worth £243. The additional 15 shillings in Smith's tables (p. 1237) evidently comes from reckoning 9.72*d.* as $9\frac{3}{4}d.$ and multiplying this little error by 6,000. If the full weight of 67.38 grains had been allowed the drachma in this calculation, its value would appear to be more than 10*d.*, and the talent would therefore be £250. But 80.7 grains of pure silver could never be worth a shilling unless an ounce of pure silver (480 grains) were worth six shillings, which was never the case. The whole error arises from forgetting that the English shilling is merely a subsidiary coin, strictly limited as legal tender to payments of two pounds sterling, so that there is no need of giving it its full nominal value of silver. In fact, at the value of standard silver assumed above ($52\frac{7}{10}d.$ per oz.), the shilling contains about $9\frac{1}{2}d.$, and at the later rate only about $8\frac{1}{2}d.$, of silver. The same error, as we have seen, would be made if we reckoned the value of the talent in the light legal-tender dollars of the United States; and a still greater one, if we took as our basis the 25-cent and 50-cent pieces, which, as subsidiary coins, are in proportion lighter even than the dollar. The slight difference between Smith's value of the drachma (9.72*d.*) and that which is based on a rate of $52\frac{7}{10}d.$ per ounce for English standard silver (8*d.*), when it is multiplied by 6,000,

gives exactly £43, the difference between Smith's estimate of the talent (excluding the 15*s.* above explained) and £200.

It is now well understood that Solon reduced the Athenian coinage from the Aeginetan standard, not by an arbitrary debasement of the coins, but by introducing the Euboean gold talent as a standard of weight for silver as well as for gold. The Aeginetan still remained the regular standard in most other Greek states, and at Athens it was recognized and largely used in commercial transactions with foreigners. According to an inscription of the first or second century B. C., 100 commercial (i. e. Aeginetan) minas were the legal equivalent of 138 Athenian minas. This would make the Aeginetan talent weigh about 80 pounds avoirdupois, though the actual weight of the best coins of this standard would raise this to about 82 pounds.[1] The Aeginetan talent would therefore be worth about £276, or $1,345. Corinth, however, had adopted the Euboean standard for silver, probably before Athens, certainly independently of Athens. The well-known Corinthian staters with a Pegasos and Koppa are of the same weight as two Attic drachmas; the Corinthian stater, however, was not divided into two drachmas, but into three; so that the Corinthian drachmas of Thuc. I. 27 were equivalent to neither Aeginetan nor Attic drachmas, but each was two thirds of a Solonic drachma. No Athenian coins of the period before Solon are known to exist; but the accounts of the change of the Attic silver standard made by Solon, the substantial agreement of these accounts with the statements concerning the relation of the Solonic to the Aeginetan drachma, and the relative weight of the actual coins of the two standards, leave no doubt that, if Attic coins of the period before Solon should be discovered, they would be of the Aeginetan standard.

[1] Two Aeginetan staters in the British Museum weigh 192 and 189 grains respectively. See Liddell and Scott's Lexicon (7th ed.), s. v. τάλαντον.

VIII. — *A Study of Dinarchus.*

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When we consider the development of Attic oratory, we find it pretty fairly confined within the limits of *one* century (about 420 B. C. — 320 B. C.), begun by a native and brought to a close by an alien, — an odd coincidence being that both acted almost exclusively as logographers, both were in the aristocratic and oligarchic interest, both suffered from a democratic reaction, and each of them but once addressed an Attic dicastery himself. (Thuc. viii. 68. 1; Dionys. H., p. 635 R.) Beside these analogies, however, there is little further coincidence or similarity of interest. In Antiphon we meet what are almost the beginnings of Attic prose, we come across the unmistakable evidences of tentative and experimental style and structure, and we find in Thucydides a near kinsman, if not a disciple, in literary workmanship.

But in the scanty remnants of Dinarchus we have to deal with the decadence of oratory and we may use the well-worn phrase, That which is good is not original, and the little that may be original is not good. The lack of attractiveness in our task, moreover, is enhanced by the limited character of what has survived of the writings of Dinarchus. I have been unable to obtain the dissertation by H. Adler, "De Dinarchi Attici Oratoris Vita et Dictione," (Berlin, 1841,) but the treatment of the orator by Blass in his distinguished "Geschichte der Attischen Beredsamkeit" left room for detailed sifting of the text and for exhaustive grouping of material. Mahaffy's sketch (History of Classical Greek Literature, p. 381, American edition) does not go beyond generalities.

1. Dinarchus even in antiquity suffered the fate of the imitator, and incurred the neglect not undeserved in an age when the student mainly sought in eminent originals models

for practice. Thus it came to pass that, even before the time of Dionysius, Demetrius Magnesius denied to the Corinthian speech-writer the authorship of the speech against Demosthenes, stating at the same time that the numerous speeches of undoubted authenticity were no longer studied. (Dionys. H., p. 632.) This absolute lack of interest is noted by Dionysius as prevailing in his own time to such a degree that the distinguished rhetorician was compelled to draw up a critical list of the speeches of Dinarchus, employing partly chronological and partly literary considerations. In the only speech which he personally addressed to an Athenian jury court, in 292 B. C., Dinarchus calls himself an old man. Dionysius then, taking seventy years as the average age so designated, by a general computation (ὁλοσχερεῖ λογισμῷ, Dionys. H., p. 638) approximately fixes the year of his birth in the archonship of Nicophemus = 361 B. C. (*cf.* Clinton, F. H., *s. a.*), so that he was the junior of Demosthenes by twenty-one years and of Aeschines by twenty-eight.

He was twelve when Demosthenes delivered his Olynthiacs, and sixteen when Aeschines spoke "De Falsa Legatione." He was twenty-three when the battle of Chaeronea was fought, and probably he settled at Athens not long after leaving his native Corinth. In 336 B. C., — according to Dionysius, — when he was twenty-five, he began to practice the profession of a λογογράφος at Athens. In 334 B. C., when Dinarchus was twenty-seven, Aristotle, whose Rhetoric was written after 338 B. C., established himself at Athens. It seems that Dinarchus in later years enjoyed the friendship of the second head of the Peripatetic school at Athens, i. e. Theophrastus, and Dionysius H. (p. 634) even suggests that it was the influence of Theophrastus through which, during his exile at Chalcis (307–292 B. C.), Dinarchus expected to effect his return to Athens. It is permissible perhaps to conjecture that this friendship arose from the common attendance of both upon the ἀκροάσεις of Aristotle. The compiler of the Vita of Dinarchus (in the X. Oratt. Vitt.) has blundered in chronological matters both elsewhere and particularly in the assertion that Dinarchus became a pupil of Theophrastus

on settling at Athens, whereas Theophrastus did not succeed Aristotle until 322 B. C. In 330 B. C., when Dinarchus was thirty-one, were spoken those two great speeches, that of Aeschines and that of Demosthenes in the affair of Ctesiphon's motion. The influence of this famous debate upon the professional fortunes of Dinarchus proved to be material. Aeschines went to reside at Rhodes. When, in 324 B. C., came on the great state trial of Demosthenes and others concerning the Harpalian fund, the professional abilities of Dinarchus, if not his political sympathies, were given a distinguished opportunity for exhibition and employment. The speech against Demosthenes, it is true, was written by Dinarchus merely in his character of λογογράφος for one of the ten public prosecutors appointed for this trial, and moreover the speech *per se* was a δευτερολογία. Still I venture to assert, that, if Aeschines had still been at Athens, his political action as well as his oratorical eminence would have given a different turn to the trial, — would perhaps have determined it. The credit — from a political and forensic point of view — of Dinarchus's speech would probably soon have been dwarfed and rendered obsolete by the name and work of the most eminent antagonist of Demosthenes. It seems certain, at all events, that henceforth the abilities of Dinarchus commanded the attention of those Athenian politicians who were partisans of Macedon. The disastrous consequences of the Lamian war, the disappearance of Demosthenes and Hyperides from the bema, — Lycurgus had died in the previous year, 323 B. C., — left Dinarchus in high reputation. The catastrophe of 322 B. C. further resulted in an oligarchic reconstruction of the state and government. The enjoyment of the franchise was limited to those whose fortune exceeded two thousand drachmas (Plut. Phocion, 28; Diodorus, xviii. 18; Grote, History of Greece, XII. 324, Harpers' ed.), twelve thousand Athenians being deprived of political rights. A few years later Dinarchus (Grote, Ib., p. 339) appears as the prosecutor of Demades before the Macedonian authorities. When we add to these data the fact that Dinarchus was a friend of Demetrius Phalereus, the all-powerful head of the Macedonian interest at

Athens, the conditions for a successful endeavor on his part to obtain Attic citizenship seem to have been given. We are confronted, however, as above, by the definite statement of Dionysius, derived from Dinarchus's own statement, *ὅτι ξένος διέμεινε* (Dionys., p. 635). And thus Dinarchus seems to have combined with his position of metic the satisfaction of ambition and the acquisition of wealth (*cf.* Fragm. 86, Müller).

2. The precise criticism of Dionysius was based on careful study of a very large number of speeches, and while that rhetorician notes imitation of Lysias and of Hyperides, he states (p. 640) that Dinarchus imitated Demosthenes most of all. Of the instruments of acquiring rhetorical excellence, all were open to him excepting the public utterance of his own performances. He was confined to the *rôle* of the logographer. Copying in itself — the entire history of classic literature may be put in evidence on this point — was not a matter of reproach or unfavorable consideration, and the semi-legal canons of modern criticism and the imputation of plagiarism must not be applied to the work of a Dinarchus.

And thus one and the same author is not at all scrupulous to avoid repetition, or about transcribing from a previous passage of his own. A phrase or sentence elaborated as the most appropriate or significant for a particular conceit or statement was often deliberately repeated; e. g. in Demosthenes, Olynth. II. 14, *ἐν προσθήκης μέρει* is repeated in Olynth. III. 31; *cf.* also XXI. 18 with ib. 69; ib. 118 with 120; 120 (*ἀναρπάζειν*) with 124; 185 with 198; Olynth. III. 31 (*ἐκνενευρισμένοι*) with XIX. 283; XXI. 200, *ἡ πόλις αὐτὸν οὐ χωρεῖ* with IX. 27.

In Dinarchus, then, we meet with verbal transcription and borrowing both from others and from himself. The most palpable case of the former occurs at one of the most impassioned points of the speech against Demosthenes (24):

(Thebes) *πόλις ἀστυγείτων καὶ σύμμαχος ἐκ μέσης τῆς Ἑλλάδος ἀνήρπασται, ἀροῦται καὶ σπείρεται τὸ Θηβαίων ἄστυ.*

Aesch. Ctes. 133: *Θῆβαι δέ, Θῆβαι, πόλις ἀστυγείτων, μεθ' ἡμέραν μίαν ἐκ μέσης τῆς Ἑλλάδος ἀνήρπασται.* The remaining phrase is credited in Photius (acc. to Mätzner, p. 85) to Stratocles, the first of the ten prosecutors.

On the other hand, Dinarchus in his speech against Philocrates copied a long passage, § 17, from Contr. Dem. 14, adjusting it but slightly to fit the structure of an indignant question, and varying the terms of abuse at the beginning of § 18. I shall have occasion to revert to this passage below.

3. As to the periodology of Dinarchus we may observe that neither Demosthenes nor Aeschines ever attempted to fit the mechanical *responsio* of Isocrates to the living debate of the bema, and in Dinarchus too we see practically nothing of it. The antitheses which we meet are established in the subject-matter and argument, rather than marked in the structure of the periods. The most striking general fault of the latter in many cases is immoderate bulk, lack of vigorous *comprehensio* (to use a Latin equivalent of *περίοδος*, Volkmann, Rhet. d. Griech. u. Röm.[2], p. 433), and neglect of Aristotle's *μέγεθος εὐσύνοπτον* (Rhet. iii. 8, p. 1409. a, 36). In the second period of Cont. Dem., Dinarchus presents a prooemium which, after five successive genitive absolutes, brings forward a somewhat trite petition for indulgence and attention. Another still larger period almost fills out §§ 4 and 5. Here again genitive absolutes lead off, three in number, the second and third with two dependent clauses each; this heavy introduction is somewhat balanced by a fourfold participial apposition to the general subject. With one of these participles (*προορῶσα*) the general subject *ἡ βουλή* is repeated, the effect being almost that of a solecism. Blass, indeed, after Mätzner had passed it by, notes, "*ἡ βουλή* abesse malim"; my own impression is, that Dinarchus here had lost the sense of unity of construction.

An enormous period extends from § 18 to § 21. It starts off as an indignant question, with a relative added. This relative has two finite verbs, *περιεῖδεν* and *ἐτόλμησεν*. These, however, while being themselves dependent verbs, are separated by a genitive absolute construction covering with its dependency some twenty-four lines of Teubner's print. This intervening structure in itself is of remarkable complexity. I present a condensed synopsis of it:—

['Αρκάδων ἡκόντων, ... ἀποστειλάντων, ... προσδεξαμένων . . . . παρὰ Θηβαίων
οἳ . . ἀφίκοντο, ...
ἔχοντες . . . . ἐροῦντες . . . . . πράξοντες . . . . δυνάμενοι . . . . .
—— οἷς ἑτοίμων τῶν 'Αρκάδων βοηθεῖν —
ἐλεησάντων, ... φανερὸν ποιησάντων . . . .
καὶ τοῦ στρατηγοῦ ὠνίου ὄντος . . . . . αἰτοῦντος, ...
πρεσβευτῶν ἐλθόντων . . καὶ δεομένων καὶ ἱκετευόντων].

This enormous body of intervening construction — certainly very questionable artistically as a "retarding *motif*," and far from *εὐσύνοπτον* — I will indicate simply by a pair of brackets, and thus present an outline of the entire period: *οὐκ ἀποκτενεῖτε . . . . τὸν μιαρὸν τοῦτον ἄνθρωπον, ὃς . . . . . περιεῖδεν . . . . καὶ* [ ] *οὐκ ἐτόλμησεν ὁ μιαρὸς οὗτος ἀλλὰ περιεῖδεν.* If we insist upon the unity of the period, this reiteration of the subject in a relative sentence is a solecism; but probably we have again to deal with an anacoluthon, and thus *ὁ μιαρὸς οὗτος* is the analogue of *ἡ βουλή* above, § 5, and a vindication of the text. In §§ 38, 39, the logographer again drifts into an awkward anacoluthon, being entangled as it were in the meshes of his own net. I present the scheme: —

τούτων γὰρ . . . . οἱ μὲν βοηθήσαντες . . . . ἐλευθέρωσαν, . . .
οἱ δὲ πείσαντες . . . . [Κεφάλου τὸ ψήφισμα γράψαντος,
ὃς . . . . ἔγραψεν . . .] καὶ [ἐξελθόντων τῶν ὑμετέρων πατέρων]
ἐξεβλήθη ὁ . . . φρούραρχος.

Not quite so awkward, although quite heavy, is the period §§ 46, 47, distinctly rambling until the speaker has struck the devoted object of his denunciation, when, after two successive relatives brought in by anaphora, there are poured out seven successive participial appositions. Such is the monotony of denunciation.

The speech against Philocrates starts with a period that covers the first three sections. An indignant question leads off, coupled with an oath, the real force of the period being however thown upon the relative clause. The principal verb of the latter is ushered in by seven concessive participles, the adversative force of which is exceptionally marked by a subsequent *ὅμως*. Similarly in Phil. 16, Dinarchus employs the device of the indignant question (to introduce the second member

of an antithesis) the keenness of which, however, is greatly blunted by excessive appendages. Cont. Philocrat. 18, being the second member of an extremely long-winded antithesis (transcribed in the main from Cont. Dem. 14 sq. as noted above), is another anacoluthon. The relative clause after *τὸν δὲ μιαρὸν ἄνθρωπον τοῦτον καὶ προδότην*, with its dependencies, extends over ten lines of Teubner's print and the governing verb is never given. The analogies given above seem strong enough to allow us to dissent from the Zurich editors and Mätzner, who assume a lacuna. The real continuity of the discourse is patent enough. Summing up the bulky relative clause in *Ἃ χρὴ λογισαμένους ὑμᾶς* the real verb for *τὸν δὲ μιαρόν* is to be understood in *μισεῖν τοὺς πονηρούς, ἀνελεῖν ἐκ τῆς πόλεως τὰ τοιαῦτα θηρία*, § 19.

Dionysius particularly enlarges upon the versatility of Dinarchus (p. 639 sqq.), mentioning specific orations in which Dinarchus copied the type of Lysias. Hyperides too served as a prototype. The extant oration,[1] however, and the *torsi* of the two others, may be set down as performances in which the efforts of Dinarchus are more directed towards the Demosthenian model. There is practically no *διήγησις*, — hence there was no place for the quiet tenor of Lysian narrative, nor of that peculiar flavor which the ancient *τεχνογράφοι* called *ἦθος*: evidently Dinarchus here confines himself to a passionate and sustained style of invective and denunciation; it is a case of high pressure from beginning to end. This perhaps accounts for the over-crowded periods, for the excessive use of participial apposition, as, e. g., Cont. Dem. 14, where the phrase *Κόνωνος υἱεῖ τοῦ τοὺς Ἕλληνας ἐλευθερώσαντος* truly cripples the force of the participial dative structure into which it is inserted. At the end of Cont. Dem. 15, *ὁ . . . . ἀποσχόμενος* is fully co-ordinated with the preceding *ὃς . . . . φανερός ἐστι*. Specific conjunctions and finite construction of subclauses is almost entirely wanting. A rare case is Cont. Dem. 93, *ἐπειδὴ . . . . προσγέγονε — ἀγωνιζ'μεθα*, — where the antithesis is specially marked. Still, we have a few *περίοδοι*

[1] It is noteworthy that Dionysius quotes, not Cont. Demosth., but *κατὰ Πολυεύκτου*, as a special illustration of Dinarchus's Demosthenian imitation.

μονόκωλοι, in the manipulation of which Dinarchus acquits himself much more skilfully, and reminds us more of Demosthenes. Thus we have a series of rapid thrusts, Cont. Dem. 35: *ἔγραψάς τι περὶ τούτων; συνεβούλευσας; ἐπόρισας χρήματα; μικρόν τι χρήσιμος ἐγένου τοῖς ὑπὲρ τῆς κοινῆς σωτηρίας πράττουσι;* The same vein in Cont. Dem. 100 (answering his own question, scil. *τί γάρ ἐστι ῥήτορος δημοτικοῦ*): *οὐ κρίνειν ἀλλήλους; οὐκ εἰσαγγέλλειν; οὐ γράφεσθαι παρανόμων;* Here too we may quote a few vigorous asyndeta, e.g., Cont. Dem. 58: *κατηγόρους εἵλεσθε κατὰ τὸν νόμον, εἰσῆλθεν εἰς τὸ δικαστήριον, ἀπελύσαθ' ὑμεῖς . . . . —;* Ib. 65: *κινδυνεύουσαν ὁρῶν ὑπὲρ σωτηρίας, ὑπὲρ παίδων, ὑπὲρ γυναικῶν, ὑπὲρ δόξης, ὑπὲρ τῶν ἄλλων ἀγαθῶν ἁπάντων.*

4. Emphatic and abnormal position of single words and phrases was a distinctly Demosthenian device, to prick his hearers as it were, and keep their attention at a high degree of tension. (Cf. Dionys. 982, *τὸ ἐξαλλάττειν ἐκ τοῦ ξυνήθους.*) Demosthenes employs two forms, *bold anticipation* ("Vorschiebung," Blass, Dem., p. 121), and *late and unexpected introduction.* The former is practically wanting in the extant remains of Dinarchus. (The dignified Aeschines, by the way, disdains employing this device.) The latter construction, however, occurs in Dinarchus with such frequency that there cannot be any doubt of his conscious effort and deliberation. A few quotations from Demosthenes may be premised by way of illustration: —

Dem. XXIV. 189: *τί δεῖ ταῦτα λέγοντα ἐνοχλεῖν με νυνί;*
" " 200: *ταῦτα δ' ἐστὶ τί;*
" " 215: *εἰσὶ δ' οὗτοι τίνες;*
" XXIII. 52: *οὐκ ἔξεστι δὲ ποί;*
" II. 5: *λοιδορίαν εἶναί τις ἂν φήσειε κενὴν δικαίως.*
" XXI. 63: *οὐκ ἐβάδιζεν ἐπὶ τὰς τῶν χρυσοχόων οἰκίας νύκτωρ.*
" VIII. 62: *εἰ μηδὲν ἄλλο, ἐξαπατᾶν, ὑμῖν δ' ἀπειλεῖν ἤδη.*
" XVIII. 98: *φέρειν δ', ὅτι ἂν ὁ θεὸς διδῷ, γενναίως.*

With these we may compare: —

Dinarch. c. Dem. 4: *ἵνα τιμωρήσησθε τῶν ἀξιωμάτων ἀξίως.* (cf. ib. 27, 113).
" " 4: *καὶ πρὸς τούτοις ψηφίσματα γράψαντος, ὦ Δημόσθενες, σοῦ;*
" " 8: *καὶ διὰ τί πολλοὺς ἀνήρηκας σύ . . .;*
" " 22: *ἆρ' ὑμῖν δοκεῖ μικρῶν κακῶν ἢ τῶν τυχόντων ὅλῃ τῇ Ἑλλάδι αἴτιος γεγενῆσθαι Δημοσθένης.*

Dinarch. c. Dem. 22: ἀκούσονται τὴν κρίσιν ὦ Ἀθηναῖοι τὴν ὑφ' ὑμῶν ἐν τῇ τήμερον ἡμέρᾳ γεγενημένην πάντες ἄνθρωποι.
" " 53: διὰ τὴν ἀσθενείαν τὴν τότε.
" " 60: ὥστε ἀποφύγοις ἂν παρὰ τούτοις εἰκότως...
" " 68: ἐὰν κατὰ τὸ ψήφισμα τὸ Δημοσθένους ἀπαιτῇ πέμψας ἡμᾶς Ἀλέξανδρος...
" " 68: καὶ τούτων ἀξιοῖ πυνθάνεσθαι τὴν ἀλήθειαν ἡμᾶς.
" " 76: πάλιν ἡγεμὼν ἦν τῶν Ἑλλήνων, δικαίως, οἶμαι..
" " 98: καθάπερ οἱ θεοὶ προειρήκασιν ὑμῖν ἐν ταῖς μαντείαις πολλάκις.
" c. Phil. 5: ἀλλὰ περὶ μόνης τῆς τιμωρίας δεῖν τῆς ἐν τῷ ψηφίσματι γεγραμμένης δικάσαι νῦν.
" c. Aristog. 18: ὧν οὐδὲν ἂν ἔχοι δεῖξαι συμβεβηκὸς Ἀριστογείτων αὐτῷ.

5. Similar in design and rhetorical effect is the device of structure, by the ancient τεχνογράφοι called διάλυσις, or παρένθεσις (Volkmann,[2] p. 373), or παρεμβολή (Dionys. H. 805); when very considerable in volume, it was called ὑπέρβατον καθ' ὑπέρθεσιν (Blass, Dem., p. 123). In this variety of σύνθεσις — Dionysius calls it λέξις κατεστραμμένη, the Thucydidean type of construction — Demosthenes unfolded much of his idiomatic force. (Dionys. H. 980: πρὶν ἀπαρτῖσαι τὸ ἡγούμενον, εἴτε νόημα χρὴ λέγειν εἴτε κῶλον, ἕτερον παρεμβαλεῖν [παρεμβάλλειν ?]; cf. 977.) This Dinarchus employs with skill and force. E. g.

C. Dem. 3: καὶ οὐχ ἵν' ἀφῆτε ζητεῖν προσετάξατε τῇ ἐξ Ἀρείου πάγου βουλῇ.
" 23: ὑμεῖς ἔσθ' οἱ διὰ πολλῷ τῶν ὑπὸ τούτου πεπραγμένων ἀδικημάτων ἐλάττω μεγάλας καὶ ἀπαραιτήτους ἐντεθεικότες τιμωρίας.
" 44: τῷ οὐδ' ὅποι καταφύγῃ αὐτίκα φήσοντι εἶναι.
" 48: ἀλλ' ὅμως, ἄνδρες δικασταί, οὕτω Δημοσθένης τῷ ψεύδεσθαι καὶ μηδὲν ὑγιὲς λέγειν ἑτοίμως χρῆται....
" 76: οἱ μὲν πρότερον ὄντες λαμπροὶ διὰ τοὺς ἡγεμόνας Λακεδαιμόνιοι.
" 111: εὑρήσετε γὰρ τοῦτον μὲν ἐξ οὗ προσελήλυθε πρὸς τὸ πολιτεύεσθαι γεγενημένον....

6. As Euripides among the tragedians, so Demosthenes among the orators, employs as a favorite device of πάθος the repetition of a word or phrase (διπλασιασμός, παλιλλογία, ἀναδίπλωσις, Volkm., p. 397). Aeschines practically does not employ it at all. In the use of Dinarchus in a few cases it impresses us as mannerism. Of course the survey of the context alone can guide the feeling as to its appropriateness in each case.

C. Dem. 10: *δίκαια μὲν οὖν, δίκαια τρόπον γέ τινα πάσχει τὸ συνέδριον . .*
" 28: *μισθωτὸς οὗτος ὦ Ἀθηναῖοι μισθωτός [οὗτός] ἐστι παλαιός.*
" 27: *μόνως γὰρ οὕτως, ἄνδρες Ἀθηναῖοι, μόνως καὶ τοὺς ἄλλους ποιήσετε βελτίους.*
" 40: *ἐκεῖνοι ἦσαν, ἐκεῖνοι, ὦ Ἀθηναῖοι ἄξιοι σύμβουλοι.*
" 29: *μὴ ἀφῆτε, ἄνδρες Ἀθηναῖοι, μὴ ἀφῆτε τὸν κτέ. . . .*
" 46: *πολλοί, ὦ ἄνδρες, πολλοὶ τῶν πολιτῶν . . . . . θεωροῦσιν ὑμᾶς κτέ.*
" 76: *τότε, ὦ Ἀθηναῖοι, τότε.*
" 84: *μή, ὦ Ἀθηναῖοι, μή . . .*

7. Certain of the *σχήματα λέξεως* appear as common instruments of oratory. Pre-eminent among these is anaphora. Dinarchus has employed it more frequently in proportion than either Demosthenes or Aeschines; at the same time, the student does not perceive any merely mechanical use of it; there is much real force marked and conveyed in Dinarchus's anaphora.

C. Dem. 9: *ᾧ τὴν τῶν σωμάτων φυλακὴν ὁ δῆμος παρακαταθήκην ἔδωκεν, ᾧ τὴν πολιτείαν καὶ δημοκρατίαν πολλάκις ἐγκεχείρικεν, ὃ διαπεφύλαχε τὸ σὸν σῶμα . . . .*
" 24: *(πόλιν) εἰς ἣν ἐπρέσβευσεν ὑφ' ὑμῶν ἀποσταλείς, ἧς ὁμόσπονδος καὶ ὁμοτράπεζος πολλάκις γέγονεν, ἣν αὐτός φησι σύμμαχον ὑμῖν ποιῆσαι . . . .*
" 28: *οὗτος ἦν ὁ τὴν πρεσβείαν . . . . καλέσας . . . . , οὗτος Φιλοκράτει συναπελογεῖτο τῷ γράψαντι πρὸς Φίλιππον εἰρήνην.*
" 66: *τί γὰρ ἐροῦμεν . . . . ; τίσιν ὀφθαλμοῖς ἕκαστος ὑμῶν . . . . ἰδεῖν τολμήσει . . . .* (67) *τίνας τὰς ἐλπίδας ἕξομεν κτέ. ;*
" 72: *ἐγένετο πόλις ἐγένετο μεγίστη.*
" 73: *τότε . . . . , τότε . . . . , κατ' ἐκείνους τοὺς χρόνους . . . .*
" 75: *ὅτε Κόνων . . . . ἐνίκησε, ὅτε Ἰφικράτης ἀνεῖλε . . . . , ὅτε Χαβρίας κατεναυμάχησε κτέ.*
" 77: *τὸν ἐπ' αὐτοφώρῳ . . . . , τὸν οὐκ ἀπεχόμενον . . . . , τὸν εἰς τὰς δεινοτάτας κτέ.*
" 93: *τίς οὕτως εὔελπις ὑμῶν ἐστι, ὦ Ἀθηναῖοι, τίς οὕτως ἀλόγιστος, τίς (οὕτω) . . . . ἄπειρος, ὅστις κτέ.*
" 96: *ποῖαι γὰρ τριήρεις εἰσὶ κατεσκευασμέναι διὰ τοῦτον . . . . ; ἢ ποῖοι νεώσοικοι τούτου πολιτευομένου γεγόνασι; κτέ.*
Cf. also the indignant questions in § 100, and in C. Aristog. 11.
C. Philocr. 10: *οὗτος ἀποδώσεται . . . . τὴν Μουνυχίαν . . . . , οὗτος ἐξαγγελεῖ τοῖς πολεμίοις σύνθημα . . . . , οὗτος προδώσει κτέ.*

8. The employment of strongly flavored or vituperative epithets, *σχετλιασμός*, was classed by the ancient *τεχνογράφοι* as a *σχῆμα διανοίας*. In this point the tradition of the bema seems to have tended to exaggerated and somewhat stereotyped abuse, and herein Dinarchus probably did

not go beyond the normal limits. This is best illustrated by giving parallel quotations from Aeschines and from Dinarchus.

AESCHINES.	DINARCHUS
Cont. Ctes. 79: ὁ μιαρὸς οὗτος.	Cont. Dem. 10: τοῦ θηρίου τούτου.
" 99: οἱ μὲν γὰρ ἄλλοι ἀλάζονες . . .	" 15: τὸν δὲ κατάπτυστον τοῦτον καὶ Σκύθην.
" 101: ὁ μιαρὸς καὶ ἀνόσιος ἄνθρωπος.	" 16: τοῦτο τὸ κάθαρμα.
" 131: ὦ τῆς Ἑλλάδος ἀλιτήριε . . .	" 18: τὸν μιαρὸν τοῦτον ἄνθρωπον.
" 182: τοῦ θηρίου τούτου.	" 21: ὁ μιαρὸς οὗτος καὶ ἀσεβής.
" 207: τὸν γόητα καὶ βαλαντιοτόμον.	" 24: ὁ μιαρὸς οὗτος.
" 277: κάθαρμα . . .	" 40: τὰ τοιαῦτα κινάδη . . .
" 212: τὴν μιαρὰν κεφαλὴν ταύτην.	" 50: ὦ μιαρὸν σὺ θηρίον.
" 246: βδελυρός.	" 92: τοῦ μιαροῦ καὶ γόητος τούτου.
Fals. Leg. 34: τὸ θηρίον τοῦτο.	Cont. Aristog. 10: τοῦτο τὸ θηρίον . . .
" 124: τοῦ γόητος ἀνθρώπου.	Cont. Phil. 18: τὸν . . . μιαρὸν ἄνθρωπον.
" 180: τῷ λογογράφῳ καὶ Σκύθῃ . . .	" 19: τὰ τοιαῦτα θηρία . . .

9. *Δεινότης λέξεως.* In quaint, bold, and telling words and phrases Demosthenes had been an expert, boldly challenging the criticism of conservative purists such as Aeschines, whose practice is well known. The ideal of the ex-actor and courtly orator was dignity above all things, and while Aeschines is a great master in the production of witty and epigrammatic sayings, he avoided novelty and boldness of expression. His criticisms of Demosthenes's rhetoric are well known; e. g., C. Ctesiph. 16, 72, 142 (famous stricture on Demosthenes's *μιαρὰ καὶ ἀπίθανα ῥήματα*), 200, 229, 253; Fals. Leg. 21, 153; Timarch. 119, 167, 170; to which add the criticism reflected in Demosth. XIX. 255. Of these passages all but two seem to bear upon the diction and phraseology of Demosthenes. (Cf. Dionys. H. 1063, 1064)

In taking up details we must again remind ourselves of the scanty condition of Dinarchus's remnants.

C. Dem. 29: *μετοιωνίσασθε τὰς τῆς πόλεως πράξεις*, the repetition of the expression suggesting that Dinarchus deliberately made or chose what he considered a pointed and tell-

ing word. 92: *μετοιωνίσασθαι τὴν τύχην καὶ μεταλλάξασθαι βουλόμεθα.*

In C. Dem. 64 Dinarchus uses *περιχαρακόω* metaphorically as I think; Mätzner insists upon the primary meaning of the term: *τὸν περικεχαρακωμένην προδεδωκότα τὴν πατρίδα ταῖς αὑτοῦ συμβουλίαις.* In another place (Aristog. 4) Dinarchus has copied a Platonic phrase: *εἰ μὲν οὖν ἐγγενήσεσθαι (ἐγγενέσθαι?) βούλεσθε δ ε υ σ ο π ο ι ό ν ἐν τῇ πόλει πονηρίαν;* (Cf. Plato, Rep. 429 e, 430 a.)

In a passage of much earnestness and almost solemnity Dinarchus uses the phrase *κινδυνεύειν περὶ τοῦ ἐδάφους τοῦ τῆς πόλεως,* C. Dem. 99, probably copied from Aeschines Ctes. 134, *ἡ δ' ἡμετέρα πόλις . . . ἀγωνίζεται . . . ἤδη περὶ τοῦ τῆς πατρίδος ἐδάφους.* Sarcasm is evidently aimed at in the following phrase, C. Dem. 36: (*ἐπιστολὴν*) *ἐκ τῶν δακτύλων ἀναψάμενος π ε ρ ι ε π ο ρ ε ύ ε τ ο.* Here Mätzner quotes Aesch. 164: *τὰς ἐπιστολὰς ἃς ἐξηρτημένος ἐκ τῶν δακτύλων περιῄεις.* Perhaps also there was a reminiscence of Dem. XIX. (De Corona), 255: *ἂν πιλίδιον λαβὼν ἐπὶ τὴν κεφαλὴν περινοστῇς.* (Plato, Rep. 558, a: *περινοστεῖ ὥσπερ ἥρως.*)

10. On some *ἐ ν θ υ μ ή μ α τ α.* The student, after having traversed the text of Dinarchus in every direction and having sifted the scanty material with some care, will return with increased regard to the summaries of Dionysius. That critic (646 sq.) says of Dinarchus: *λείπεται (δὲ) Δημοσθένους . . ., κατὰ δὲ τὴν εὕρεσιν τῶν ἐπιχειρημάτων, τῷ μὴ καινὰ καὶ παράδοξα λαμβάνειν ἀλλὰ φανερὰ καὶ ἐν μέσῳ κείμενα.* The *ἐπιχειρήματα* (cf. Volkm.[2] 154 sqq.), i. e. the elaborate arguments and ideas rhetorically appropriate rather than incidental from the strict standpoint of logic and of jurisprudence, — these in Dinarchus are truly somewhat commonplace and hackneyed, e. g. in contrasting the dignity of the Areopagus with the weight and worth of the defendant, C. Dem. 9; or in 72 sqq., where Dinarchus enlarges upon the true cause of political prosperity, i. e. the eminence and integrity of leading citizens. After having glanced at the career of Epaminondas and Pelopidas, eminent men abroad, he goes on to

quote the eminent services of Athenian leaders. The copying from Aeschines is unmistakable: —

Aeschin. Ctes. 243: ἅπαντες γὰρ ἅμα σοι ἀποκρινοῦνται, ὅτι Χαβρίᾳ μὲν (scil. τὰς δωρεὰς ἔδοσαν καὶ τὰς εἰκόνας ἔστησαν) διὰ τὴν περὶ Νάξον ναυμαχίαν, Ἰφικράτει δὲ ὅτι μόραν Λακεδαιμονίων ἀπέκτεινε, Τιμοθέῳ δὲ διὰ τὸν περίπλουν τὸν εἰς Κέρκυραν.

Din. c. Dem. 75: ὅτε Κόνων, ὡς οἱ πρεσβύτεροι λέγουσι, ἐνίκησε τὴν ἐν Κνίδῳ ναυμαχίαν, ὅτε Ἰφικράτης ἀνεῖλε τὴν Λακεδαιμονίων μόραν, ὅτε Χαβρίας ἐν Νάξῳ κατεναυμάχησε τὰς Λακεδαιμονίων τριήρεις, ὅτε Τιμόθεος τὴν ἐν Κερκύρᾳ ναυμαχίαν ἐνίκησε.

This parallel is noted by the editors. The following, I think, is not. Dinarchus (111), in discussing the point (whether) πότερον ἡ πόλις ἐλεεινοτέρα διὰ τοῦτον γέγονεν ἢ διὰ τὴν πόλιν Δημοσθένης, says: —

Din. c. Dem. 111: εὑρήσετε γὰρ τοῦτον μὲν λαμπρὸν ἐξ οὗ προσελήλυθε πρὸς τὸ πολιτεύεσθαι γεγενημένον, καὶ ἀντὶ μὲν λογογράφου καὶ μισθοῦ τὰς δίκας λέγοντος ὑπὲρ Κτησίππου καὶ ἑτέρων πολλῶν πλουσιώτατον ὄντα τῶν ἐν τῇ πόλει, ἀντὶ δὲ ἀγνῶτος καὶ οὐδεμίαν πατρικὴν δόξαν παρὰ τῶν προγόνων παρειληφότος ἔνδοξον γεγενημένον, τὴν δὲ πόλιν οὐκ ἀξίως ἑαυτῆς οὐδὲ τῆς τῶν προγόνων δόξης διακειμένην.

Dem. 111. 29: ἀποβλέψατε δὴ πρὸς τοὺς ταῦτα πολιτευομένους, ὧν οἱ μὲν ἐκ πτωχῶν πλούσιοι γεγόνασι, οἱ δ' ἐξ ἀδόξων ἔντιμοι, ἔνιοι δὲ τὰς ἰδίας οἰκίας τῶν δημοσίων οἰκοδομημάτων σεμνοτέρας εἰσὶ κατεσκευασμένοι, ὅσῳ δὲ τὰ τῆς πόλεως ἐλάττω γέγονε, τοσούτῳ τὰ τούτων ηὔξηται.

This is a stencil-like performance, for, although there is no strictly verbal concordance, the sentiment and its unfolding are exactly the same.

These then are the results derived from one entire oration and the fragments of two others; but even these afford no mean opportunity for realizing the methods and rhetorical characteristics of the last orator in the Attic canon.

IX. — *The Vowels e and i in English.*

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In this paper I propose to examine the development of these sounds in English, from the Old Germanic, following the same order in the analysis that was used in my paper on the vowel *a* ("History of the *a*-Vowel from Old Germanic to Modern English," Transactions, Vol. XII. pp. 68–88).[1] After

[1] The following abbreviations have been used: IG., for Indo-Germanic; OG., for Old Germanic; G., for Gothic; ON., for Old Norse; OHG., for Old High German; OS., for Old Saxon; OE., for Old English; ME., for Middle English; NE., for New English.

alluding briefly to the origin of these sounds in OG., I shall show what became of them in OE. I shall then show the origin of the OE. sounds *i, e, íe, éa,* giving lists of all words with these vowels which can be shown to be of OG. origin. I shall not allude to *æ* and *eá* in this section, because I have spoken fully of them in the "*a*-Vowel." Thirdly, I shall show what has become of *i, e, íe, ié, éa,* and also of *æ, eá,* in NE., paying attention both to pronunciation and to spelling. Lastly, I shall show the origin of the sounds in NE. which are heard in *hid, tell, hat, fern;* sounds which I indicate by the signs *i̧, ȩ, æ, ǫ̣*. Other signs used to indicate pronunciation are *i* as in *eat, a* as in *ask, ai* as in *right, o̧* as in *draw, o* as in *clover, ǫ* as in *not, u* as in *true, u̧* as in *cook.* Here also the origin of the NE. letters will be briefly examined.

In OE. there is some confusion in the orthography. As a rule, I have given the more usual spelling, calling attention to the variations where they seemed of importance. In one case I have departed from this rule. The umlaut of *éa, éo,* has been spelled always *íe* to distinguish it from *y*, the umlaut of *o, u,* though in most cases *y* is the more usual spelling for the former as well as for the latter. I think this distinction is justified by the fact that the umlaut of *éa* and *éo* is not confounded in the later history of the language with the umlaut of *o, u,* and must therefore have had a somewhat different pronunciation. Where a great variety of forms are in use, the one that is most correct according to the analogy of the language has been chosen.

SECTION I. — *E* AND *I* IN OG.

In the great majority of cases OG. *e* is from IG. *a*, and OG. *i* from IG. *i*, but in at least one case OG. *e* is from *i;* this is G. *vairs*, ON. OE. *wer*, L. *vir*, Skr. *vīras;* and there is a considerable group of cases where OG. *i* seems to take the place of IG. *a*, though I have not been able to discover any cause for this peculiar development, except where a following nasal causes the change. This anomalous *i* occurs in the following words, given here in their OE. forms: *clippan, film, firas, fiþru, hild, micel, mid, middangéard, nifol, nigon, scip, sige, spillan, sticel,*

þille, þillian, þridde, wicg, wild, willa, willan, wilnian, wit. The related words in other dialects will be found in the list in Section II. In determining the OG. vowel, a consensus of OE., OHG., and ON. is conclusive. The Gothic is here valueless, owing to its peculiar vowel-system. Occasionally OE. and ON. alone may decide, especially if supported by some European dialect.

The cognates are given in the lists in Section II., and are therefore omitted in the lists in Section I.

It will be seen that I cannot find any proof of the correctness of the older view which regarded all IG. *a* with raised tone as equivalent to OG. *i*, thus making G. the representative of the primitive state. But there is also a lack of evidence for the more recent view, that regards *i* from IG. *a* as a development posterior to the OG. period. I do not see how we can avoid the assumption of OG. *i* and *e*, derived from IG. *a*, though, as will appear in the remainder of this section, it is not always possible to say why *i* is used rather than *e*.

A. — 1. OG. *e* remains unchanged in OE. in the following words. Before labials: *drepan, drepe, screpan.* Before dentals: *etan, fetan, fetor, metan, set, cnedan, tredan, weder.* Before palatals: *brecan, frec, recan, sprecan, wrecan, bregdan, regn, segl, stregdan, trega, þegn, weg, wegan.* Before fricatives: *nefa, swefan, swefen, wefan, cweðan, eðða, feðer, weðer, brest, brestan, lesan, nesan, nest, sess, þrescan, þrescwéald, wesan, west.* Before liquids: *beran, bere, sceran, spere, teran, þweran, belgan, bellan, cwelan, delfan, dwelan, fela, felhan, fell, helan, help, helpan, helm, hwelp, melcan, meltan, selcan, seldan, self, snel, spell, stelan, swelgan, swellan, sweltan, teld, teldan, þel, wel.*

2. OG. *e* becomes *i* in OE. Here there is usually an *i* or *j* in the following syllable. In all these cases we can assume OG. *i*, but the *e* is more probable. See Section II. A. 3 for the evidence. The words are *scip, tiber, glig, higora, nifol, rift, brim, dim, grim, lim, niman, hilt, spild,* and the 2d and 3d sing. pres. ind. of the 36 strong verbs mentioned in A. 1 above.

3. OG. *e* becomes *éo* before *r* + consonant, before *h*, often

before *l* + consonant, and before an *o*, *u*, in the following syllable. See the details in Section II. C.

Before *r* + consonant: *béorgan*, *béorcan*, *béorh*, *béorht*, *béorma*, *béornan*, *déorfan*, *dwéorg*, *Éorcanstan*, *éorþe*, *éorl*, *Eormenric*, *éorp*, *féorr*, *féorh*, *géorn*, *géorran*, *héord*, *héorte*, *hwéorran*, *hwéorfan*, *céorfan*, *séordan*, *sméortan*, *stéorfan*, *swéorfan*, *swéord*, *swéorcan*, *þéorf*, *wéorc*, *wéorpan*, *wéorð*, *wéorðan*.

Before *l* + consonant: *éolh*, *séolh*, *séolf*.

Before *h*: *éoh*, *féohtan*, *hwéohl*, *séox*(*hs*).

Before consonants followed by *o*, *u*: *éodor*, *méodo*, *hwéoðu*, *béofor*, *éofor*, *héofon*, *séofon*, *géolu*, *héor*, *héorot*, *sméoru*, *swéostor*, *méotud*.

Anomalously also in *céole*, *éoten*, *géond*.

4. OG. *e* becomes *ie* where we should otherwise expect *éo*, by umlaut. Before *r* + consonant: *biergan*, *fiersn*, *fierst*, *fiergen*, *hierde*, *ierre*, *smierwian*, *wiersa*, *wiercan*, *wierþiani*. Before *ll*, in *hiell*; before *hs*, in *siex*. Also in 2d and 3d sing. pres. ind. of the strong verbs in 3.

5. OG. *e* becomes *ié* after *g*. Cases are *giéfan*, *giéfa*, *giéfu*, *giéft*, *giéld*, *giéldan*, *giélp*, *giélpan*, *giéstrandæg*, *giétan*, *giéllan*. This change to *ié* is, however, often omitted, and it is also written *i* and *y*.

6. OG. *e* is lengthened in auslaut to *ē*, when not enclitic. E. g. *mē*, *þē*, *hē*.

7. OG. *e* becomes *ēo* in *ēode*, *glēow*, *hnēow*. I reserve the discussion of these cases till I come to speak of OE. *ēo*.

B. — OG. *i*. 1. When uninfluenced by following sounds, OG. *i* remains *i* in OE. This occurs in the following words, arranged according to the consonants which follow the vowel, first, those from IG. *i*, and then those from IG. *a*.

From IG. *i* are the following (I give the OE. forms): *swip*, *swipa*; *biter*, *hnitu*, *wit*, *wlite*; *hlid*, *scrid*, *widowe*; *cwic*, *gicel*, *liccian*, *nicor*, *spic*, *þic*, *Tig* (*Tiu*), *wig*; *clif*, *lifer*, *lifian*, *swift*, *swiftu*; *frið*, *grið*, *hiðer*, *hlið*, *lið*, *niðe*, *niðer*, *wið*, *wiðer*; *fisc*, *hrisil*, *wisnian*; *flint*, *gin*, *hinde*, *min*, *sinder*, *sinu*, *firen*, *milde*. Add to these the preterite plural and passive participle of all verbs of Class II. (See Trans., Vol. XIII. p. 72.)

From IG. *a* are the following: *clippan; micel, sticel, sige, wigon, wicg; mid, þridda; fiðru; blind, cin, finger, grindel, hinde, hlin, hlinc, hring, lind, swinsian, þing, wind, wintar, timber, firas, film, hild, milte, spillan, þille, wild, willa, willan, wilnian.* Add to these the following present stems of verbs of Class I. a.: *biddan, sittan, fricgan, licgan, þicgan;* and of I. c.: *frignan, bindan, bringan, drincan, findan, grininan, grindan, hrindan, cinnan, clingan, cringan, cwincan, linnan, rinnan, sinnan, singan, sincan, scrincan, slingan, slincan, spinnan, springan, stingan, stincan, swindan, swingan, swincan, þingan, þindan, þrindan, þringan, tingan, windan, winnan, wringan; grimman, hlimman, hrimpan, climban, crimman, limpan, swimman.*

2. OG. *i* becomes *e* in five cases specially discussed in Section II. The words are, *ed; begen, twegen; nest; wer.*

3. OG. *i* becomes *éo* before *r* + consonant: *béorc, léornian, méord, wéornian;* before *l* + consonant: *méolc, séolc, séolfor;* before *h: wéoh, féohan* (*fēon*), *fréohan* (*frēon*).

4. I find no cases of *íe* or *ié* for OG. *i*.

5. OG. *i* becomes *ēo* in *sēowjan, fēon, frēon.* I will reserve the discussion of these till I come to speak of OE. *ēo.*

SECTION II.

A. — OE. *i.* This sound takes the place, (1.) of OG. *i*, IG. *i;* (2.) of OG. *i*, IG. *a;* (3.) of OG. *e*, IG. *a.*

1. OE. *i* = OG. *i* = IG. *i.*

Here belong all preterite plurals and past participles of OG. strong verbs of Class II., of which a list is given in the Transactions, Vol. XIII. p. 72, and also,

biter, ON. bitr, OHG. bittar [G. baitrs]: cp. Skr. bhid; Fick, 210.
clif, ON. klif, OHG. klep, NHG. klippe; F. 52.
cwic, ON. kvikr: cp. βίος, L. vivus; F. 55.
firen, ON. firn, OS. firin, G. faírins; F. 175 [cp. L. per?].
fisc, G. fisks, L. piscis; F. 186.
flint, Swedish flinta, OHG. flins: cp. πλίνθος; F. 194.
frið *m.*, friðu *f.*, ON. friðr, OHG. fridu, Skr. prī; F. 190.
gicel, ON. jökull: cp. Lithuanian izas, *ice;* F. 31.

gin, ON. gin: cp. OHG. geinōn, and χαίνω; F. 106.
grið, ON. grið. No other cognates. F. 111.
hiðer, G. hidre, L. citra; F. 74.
hinder, G. hindar; and OE. hinderian, ON. hindra; OG. stem hi, IG. ki; F. 74.
hlid, ON. hlid: cp. L. inclinare; F. 88.
hlið, ON. hlið: cp. OE. hlid, and κλίνω; F. 88.
hnitu, ON. nit, OHG. niz: cp. Lettish gnidas, κονιδ-; F. 81, Schade 410.
hrisil: cp. G. hrisjan, ON. hrist, and OE. hrisian; Grein 2. 110.
liccian, OHG. lecceōn; but cp. G. laigōn, O. Bulg. liza, L. lingere, λείχω, Skr. lih; F. 269, Schade 531.
lið, G. liþus: cp. OE. līþan and L. litare; F. 270.
lifer, ON. lifr, OHG. libara; F. 271.
lifian, ON. lifa: cp. ἀλείφω, Skr. lip; F. 271.
milde, ON. mildr: cp. Slavic mil; Schade 609, F. 235.
min: cp. ON. minnr, G. mins, L. minor; F. 239.
nicor, ON. nikr, NHG. nix; F. 163.
niðe and niðan, ON. neþan, OHG. nidana, Skr. ni: F. 162.
niðer, ON. niðr, Skr. nitarām; F. 162.
scrid and scriðe, ON. skriðr, OHG. scrit: cp. OE. scrīdan; F. 339.
sinder, ON. sindr: cp. Skr. sindhu; F. 322.
sinu, ON. sin, OHG. senawa, Skr. snāva = *sinava; F. 321.
spic, ON. spik: cp. Skr. sphik; F. 355, Schade 850.
Tiu *and* Tig, OHG. Zio, ON. Týr: cp. Διός, Skr. div; Schade 1291, F. 122. OE. also in Tiwesdæg.
tin, ON. tin, OHG. zin; Schade 1263, F. 121.
þic, ON. þikkr, OHG. dikki, O. Irish tiug; F. 133.
wið, ON. við; cp. Skr. vi; F. 304.
wiðer, ON. viðr, G. viþra; from wið; F. 304, Schade 1138.
widowe *and* widwe, G. viduvō, Skr. vidhava; F. 305.
wig *and* wih, see wéoh.
-wisnian, ON. part. wisinn, OHG. wesanēn; cp. ON. visna and OE. wis, Skr. vish; F. 306.
wit, ON. G. vit: cp. ON. vēr, G. veis; F. 304.
wlite, ON. litr, G. vlits: cp. OE. wlītan II.; F. 310.

To these may be added *swift*, *swiftu* and *swip*, *swipa*, ON. *svifta*, *svipr*, from ON. *svīpa* II. All Germanic derivatives are from an *i* root; but cp. σόβος, σοβέω, L. supare, O. Bulg. sŭpă. F. 365 f.

2. OE. *i* = OG. *i* = IG. *a*.

Here belong all verbs of Class I. with a nasal + consonant in the final of the root; e. g. *bindan, swimman, frignan;* and also verbs with *-ja* as thematic vowel, *biddan, licgan, sittan, þicgan.* It is regular in Germanic before nasals and frequent before *-ja.* In the following list, I have divided the nasals from the other cases.

blind, ON. blindr, OHG. blint: cp. Lithuan. blĕstis and OE. blandan, V.; F. 221.
cin, ON. kinn, G. kinnus, OHG. kinni: cp. γένυς, Skr. hanu; F. 46.
finger, ON. fingr, G. figgrs, from OG. fanhan, OE. fōn; F. 185.
grindel, OHG. grintil, ON. grind: cp. O. Bulgar. grĕdu; F. 111.
hinde, ON. hind, OHG. hinta: cp. G. hinþan, handus; F. 61.
hlin, OHG. lin, ON. hlynr: cp. Russian klenŭ; F. 90.
hlinc, ON. hlikkr: cp. O. Bulgar. po-klĕk-nati.
hring *and* hringan, ON. hringja: cp. ON. hrang, Skr. kark; F. 82.
lind, ON. lind, OHG. lintā: cp. OE. linnan, I. c.; F. 264.
swinsian, isolated in Germ.: cp. L. sono, Skr. svan; F. 361.
timber, ON. timbr: cp. G. timrjan and δέμω; F. 117.
þing, ON. þing, OHG. ding: cp. Lithuan. tenkti; F. 134.
wind, ON. vindr, L. ventus, Skr. vāta; F. 279.
wintar, G. vintrus, ON. vetr; Schade 1165, F. 284.

The following *-i* and *-ja* stems have *i* in OG. for IG. *a;* but cases of *e* in OG. for IG. *a* under similar conditions also occur. See II. A. 3.

clippan, ON. klippa: cp. OHG. chluppa, ON. klappa, Lithuan. ap gleb-ti, glob-ti; F. 51.
film, filmen, O. Frisian filmene: cp. πέλμα; F. 181.
fiðru, ON. fiþri, from OE. feðer, ON. fjöðr; F. 172.
firas (féoras, fieras, fyras), ON. firar, OHG. firihi: cp. G. faírhus, OE. féorh; F. 188.
hild, ON. hildr, OHG. Hildi- *and* hiltja *f.*; F. 71.
micel, ON. mikill, G. mikils: cp. ON. mjök *and* μέγα; F. 226.
mid, middangéard, ON. miðr, miðgarðr, G. midja-, midjungards: cp. μέσσος = *μεθjος.
milte, ON. milti, OHG. milzi, from OE. meltan, I. c.; F. 236.
sige, sigor, G. sigis, ON. sigr. OHG. sigi, Skr. sahas; F. 315.
nigon, ON. niu, G. niun, Lithuan. dewyni, Lettish dewini; F. 163, Schade, 653.

spillan, spildan, ON. spilla, OHG. spildan, OS. spildjan: cp. OHG. spaltan, V.; F. 354.

sticel, ON. stikills, G. stikls, OHG. stechal: cp. OS. stekan, I. a.; F. 343.

þille, þillian, ON. þilja *n.* and *v.*, OHG. dillā, dillōn: cp. Lithuan. tile, Skr. tala; F. 137.

þridda, G. þridjan-, Lithuan. treczas, Aeolic τέρτος, L. tertius, Skr. trtīya; F. 141.

wicg, ON. wigg, from wegan, I. a.; F. 282.

wild, OHG. wildi, ON. wildr, G. vilþeis; F. 296.

willa, willan, G. vilja, viljan, ON. vili, vilja, OHG. willjo, willan: cp. βουλή, βούλομαι = βούλjομαι, O. Bulgar. wolja; F. 296, Schade, 1158.

wilnian, ON. vilnask, from the preceding; F. 297.

3. OE. *i* = OG. *e* = IG. *a*.

It is possible to assume OG. *i* in every case, but *e* is more probable. Nearly all the list are *-i* or *-ja* stems. Add to these the 2d and 3d pres. ind. sing. of verbs of Class I. which have *e* in the infinitive and other present forms.

brim, ON. brim; but cp. OHG. breman, L. fremo; F. 216.

dim, ON. dimmr, OHG. timber: cp. OHG. demar, L. tenebrae; F. 148.

glig, gliv, and also glēow, ON. glȳ: cp. χλεύη, OG. *glevja; F. 113.

grim, ON. grimmr: cp. ON. gremja; F. 110.

higora, OHG. hehora, ON. hegri: cp. Skr. cakravāka; F. 58.

hilt, ON. hjālt, OHG. helza, L gladius; F. 72.

lim, ON. limr: cp. lemian; F. 267.

nifol, ON. nifl, OHG. nebul: cp. νεφέλη, L. nebula. Only trace of an *i* stem in Lithuan. debesi-; F. 166.

niman, ON. nema, OHG. neman, I. b.; F. 160.

ript, ON. ript, ripti: cp. OHG. refta, ON. rept; F. 254.

scip, ON. skip, OHG. scef and scif: cp. σκάφος. No trace of an *i* stem; F. 336, Schade 792.

spild, ON. spjall, ME. speld from spaldan V.; F. 354.

tiber, ON. tapr, OHG. zebar, L. daps; Schade 1234, F. 117.

4. OE. *i* is used exceptionally for *ī* in *bliss* = *blīðs*, F. 222, and often for *y* where the error is only graphic. Here, too, may be mentioned OE. *fifealde*, OHG. *vīvaltrā*, OS. *vivoldarā*, ON. *fifrildi*, F. 182, Schade 193, where the *fi* is a reduplication of the initial sounds of the stem. The *i* is certainly long in OHG.; in the other dialects it is probably short.

B. — OE. *e* is produced (1.) from OG. *a* by umlaut; (2.) from OG. *e;* (3.) exceptionally from OG. *i*, and perhaps from OG. *ai*.

1. This has been fully treated in my article on the "*a*-Vowel," in Vol. XII. p. 78, of the Transactions. I have to add to the list there given the following words: —

dencgan, ON. dengja, MHG. tengelen: cp. OHG. tangol; F. 144.
endjan, ON. enda, OS. endjan: F. 17.
fetian, from OE. fæt, ON. fata: cp. ON. feta I. a.: F. 171.
heled, OS. helid: cp. ON. halr, OE. hæle; F. 69.
hergian, ON. herja, OHG. harjōn; F. 65.
leccan, OHG. lechan, ON. leka I. a.; F. 261.

We have also *e* for OG. *a* in the prefix and in the particle *ge*, G. *ga* and *ja-h*, OHG. *ga*, *jā*. Here the change is due to lack of accent.

2. OE. *e* = OG. *e* = IG. *a*.

This is the regular development of OG. *e* when not under consonant influence; see *i* and *éo*, Section II. A, C. Occasionally *e* appears as *ié* after *g*, *c*, *sc*, and this *ié* is often written *y*. Under this head belong all verbs with *e* in Class I., and also the following words, none of which are *-i* or *-ja* stems.

bere, ON. berr, OHG. bero, L. ferus; F. 204.
brest, ON. brestr, OHG. bresta; F. 217. Cp. βλαστάνω.
drepe, ON. drep, MHG. tref: cp. drepan, I. a.; F. 153.
eðða, G. aiþþau, ON. eða, OHG. eddo; F. 4.
feðer, OHG. fedara, ON. fjöðr: cp. πτέρον; F. 172.
fela, ON. fjöl-, G. filu, OHG. filu: cp. πολύς; F. 179.
fell, ON. fell-, G. filla-, OHG. fel: cp. πέλλα; F. 181.
fetor, ON. fjötur, OS. fetarās (pl.): cp. πέδη; F. 171.
frec, G. friks, ON. frekr, OHG. freh: cp. σπαργή; F. 192.
helm, G. hilms, ON. hjālmr, OHG. helm, O. Bulg. čalma; F. 69.
help. ON. hjālp, OS. helpa, OHG. helfa; Schade, 396, F. 73.
hwelp, ON. hvelpr, OHG. welf; F. 95.
nefa, ON. nefi, OHG. nefo: cp. L. nepos: Schade 643, F. 165.
nest, ON. nest, OHG. nest: cp. νόστος; F. 162.
regr and rēn, G. rign, ON. regn, OHG. regan; F. 259.
segl, segelian, ON. segl, sigla, OHG. segal; F. 316; but see Schade 748. From L. sagulum?
seldan, ON. sjaldan, OHG. seltan; F. 329.

self, ON. sjālfr, G. silban-, OHG. selb; F. 329.
sess, sessian, ON. sess, sessa, from sittan, I. a.: cp. L. obsessa, F. 317.
set, ON. set, OHG. sez: cp. G. sit-las, from sittan, I. a.; F. 317.
snel, ON. snjallr, OHG. snel; Schade 837, F. 351.
spell, ON. spjall, G. spill, OHG. spel; F. 355.
spere, ON. spjör, OHG. sper, L. sparus; F. 353.
swefen, ON. svefn, L. somnus; F. 361.
teld, ON. tjald, OHG. zelt: cp. δέλτος; F. 120.
trega, ON. tregi: cp. G. trigōn-, Skr. drāgh; F. 125.
þegn, ON. þegn, OHG. degan: cp. τέκνον; F. 129.
þel, ON. þil, OHG. dil: cp. O. Bulg. tĭlo, Skr. tala, and OE. þille; F. 137, Skeat, Etym. Dict. 636 (*thill*). ON. and OHG. are probably *-ja* stems, OE. an *-a* stem.
þrescwéald, ON. þresköldr, from þrescan, I. c.; F. 140.
weder, ON. veðr, OHG. wetar, O. Bulg. vedrŭ; F. 307.
weðer, ON. veðr, OHG. widar, G. viþrus, Skr. vatsara; F. 307.
weg, ON. vegr, G. vigs, OHG. weg, L. via, from wegan, I. a.; F. 282.
wel, ON. vel, OHG. wela, L. vel; F. 296.
west, ON. vest: cp. OHG. westan and L. Vesta, Gr. Ἑστία; F. 300.

3. OE. *e* is employed occasionally in MSS. for *i*, e. g. *weg* for *wig;* and for *y*, e. g. *efese, senn,* for *yfes,* G. *ubizva, synn,* G. *sunja;* and for *éa*, e. g. *brerd* for *brćard,* OHG. *prart* (not ON. *broddr*). OE. *e* also occurs exceptionally in three cases for IG. *i*, and twice for *ai*, where the *i* has become *g* and the *a* been changed to *e*. These cases are: —

ed, G. id-, ON. id-, OHG. ita, OS. id; F. 36. Only in unaccented syllables: cp. ge-, ge, from OG. ga.
nest, OHG. nest, L. nīdus. Skr. nīda, Lithuan. lizdas. Not to be confused with *nest* (2); F. 162, Schade 646.
wer, weruld, ON. ver, veröld, G. vair, L vir, Skr. vīras; F. 306.
begen, G. bai, ON. beggja, *gen.*; F. 196; cp. L. ambo, Skr. ubhā.
twegen, G. tvai, ON. tveir, OHG. zwēne; F. 126. L. duo, Skr. dvā.

C. — OE. *éo* is the regular representative of *e* and *i* before *r* + consonant and *h*. It is frequent, though not regular, before *l* + consonant, though never found before *ld* or *ll*. It is also caused by a dark vowel (*o, u*) in the following syllable. In other cases it is doubtful if we should not write *ēo*. The words in question are *ēode, glēow, hnēow,* where I have de-

termined on *ēo* for reasons which will better appear under that sound, and *céole*, *éoten*, and *géond*, which I have placed here.

Here belong the verbs with *éo* of Class I. c., and also the following words, arranged according to the final consonants of the stem. The words not otherwise noted are from OG. *e*, IG. *a*; when an *i* root occurs it is noted by a † prefixed.

1. Before *r* + consonant: —

† béorc, ON. björk, OHG. birka: cp. Lettish berzas; F. 211.
béorcan, ON. berkja: F. 206.
béorh, ON. bjarg, OHG. berg; F. 206: cp. Skr. barh.
béorht, G. bairhts, OHG. beraht: cp. Skr. bhrāç; F. 206.
béorma; cp. MHG. barm, L. fermentum; F. 205.
dwéorg, ON. dvergr, OHG. twerg; F. 155.
éorcanstān, ON. jarkna, G. airkni, OHG. erchan; F. 37.
éorþe, G. airþa-, OHG. erde; F. 23.
éorl, ON. jarl, OHG. erl; F. 26.
Éormenric, ON. jörmuni, G airmana-: cp. L. armentum; F. 23.
éorp *and* éarp, ON. jarpr, OHG. erpf; F. 37.
féorr, G. fairra, OHG. ferro, ON. fiarri; Schade 185.
féorh, G. fairhvus, ON. fjör, OHG. ferah; F. 188.
géorn, géornian, G. gairns, gairnjan, ON. gjarn, OHG. gern; F. 101.
héord, G. hairda, ON. hjörd, OHG. herta; F. 79.
héorte, G. hairtan-, OHG. herzā, ON. hjarta; F. 79.
† léornian, OHG. lirnan, O. Frisian lirna: cp. G. lais (*pret. pres.*); F. 271.
† méord, G. misdo, OS. mēda, OHG. miata; Schade 607, F. 240.
sméortan, OHG. smerzan: cp. L. merda, σμερδνός; F. 357.
swéord, ON. sverð, OHG. swert; F. 366.
þéorf, ON. þjarfr, OHG. derb; F. 137.
wéorc, ON. verk, OHG. werah; F. 293.
† wéornian, OHG. wesanēn, ON. visinn (*part.*): cp. Skr. visha; F. 306.
wéorþ, ON. verðr, G. vairþs, OHG. wert; F. 290.

2. Before *l* + consonant: —

éolh, ON. elgr, OHG. elaho; F. 28.
† méolc, G. miluks, ON. mjölk, OHG. miluh, from melcan, I. c.; F. 236.
séolh, ON. selr, OHG. selah: cp. σέλαχος; F. 328.
† séolc, ON. silki, OHG. silicho; Schade 764. Cp. L. sericum, Σῆρες.

† séolfor, ON. silfr, G. silubr, OHG. silabar; F. 323.
séolf *and* self, silf, sylf, ON. sjālfr, G. silban-, OHG. selb; F. 329.

But exceptions are very numerous; e. g. *helm, help, hwelp, seldan,* so that no rule can be given for the development of *éo* before *l* + consonant.

3. Before *h* there are but few cases; I know of no exceptions.

éoh, OS. ehu, ON. jōr, L. equus, ἵππος; F. 10.
† wéoh, wih, weh, OS. wih, ON. wē; F. 303.
hwéohl, hwéogul, hwēol, hweowul, ON. hjōl, hvel: cp. κύκλος; F. 94.
séox, síex, G. saihs, ON. sex, OS. sehs, OHG. sehs: cp. ἕξ; F. 328.
† féohan, féogan, fēon, G. fijan, ON. fia.
† fréohan, fréogan, frēon, G. frijan, ON. fria.

4. Before a consonant (*d, ð, f, l, r, st, t*) followed by *u* or *o*, whether original or the product of svarabhakti in OE.:—

éodor, OHG. etar, ON. jaðar, L. atrium; F. 37.
méodo, ON. mjöðr, OHG. metu, Skr. mathu; F. 242.
hwéoðu, ON. hwiða, *but not* G. hvāþo; F. 92. Cp. Skr. kvath.
béofor, béofian, ON. björr, OHG. bibar, Lithuan. bebruss, Skr. babhru; F. 211.
éofor, OHG. ebur, L. aper; F. 37.
héofon, OS. hebhan, ON. hifinn; Schade 377, F. 62.
séofon, OHG. sibun, G. sibun, ON. sjau: cp. ἑπτα, L. septem; F. 323.
géolu, OHG. gelo, L. helvus; Schade 296.
héor, ON. hjörr, G. hairus, OS. heru; F. 66.
héorot, OHG. heruz, L. cervus; F. 67.
sméoru, ON. smjör, OHG. smero; F. 356.
swéostor, ON. systir, OHG. swestar, L. soror; F. 360.
méotud, ON. mjötuðr, OS. metod, from metan, I. a.; F. 224.

Add to these the isolated

céole, OHG. chelā: cp. L. gula, Skr. gala; F. 44.
éoten, ON. jötunn, from etan, I. a.; F. 14.
géond, G. jaíns = OE. géonre, Cura Pastor. 443, OHG. jenēr. Perhaps the English word may be *geónd*, and from another stem than these, else its vowel is quite isolated. The *d* is peculiar to OE.

D. — OE. *íe* is the umlaut of *éa* and *éo* caused by an *i* or *j* once present in the following syllable. It occurs, therefore, for *éo* in the 2d and 3d pers. pres. ind. sing. of verbs of Class I., as *i* does for *e* (see II. A. 3); e. g. *béorgan* has *bíergst, bíergt,* just as *sēon* has *sihst, siht.* Adjectives with *éa, éo,* change the vowel to *íe* in the comparative and superlative in many cases, but not regularly. The cases of *íe* derived from *a* have been given in the Transactions, Vol. XII. p. 79. To the words given there I have to add only

cíelfor-lamb, OHG. chilburra, from OE. céalf, ON. kālfr; Schade 487, F. 45. The word is, however, obscure.

híeldan, heldan, hyldan, ON. halla, OHG. haldōn, OS. heldian; F. 71.

In the preceding, and in all other cases, the spelling *íe* is not regular. We find also forms with *e, i, y;* gradually *y* becomes the most usual; but that this spelling cannot have rightly represented the universal pronunciation is clear from the fact that OE. *íe* and *y* develop differently in ME. and NE.

OE. *íe* is the umlaut of *éo* from OG. *e,* IG. *a,* in the following cases. Various spellings are given in parentheses.

bíergan (éo, y), ON. bergja: cp. OE. beorh; F. 207.

fíersn (i, y), G. fairzna, OHG. fersana; F. 188.

fíerst (i, y), ON. frest, OHG. frist; F. 192; but Schade 221 considers this an *i* root, OG. *fristi-.

fíergen (i, y), ON. fjörgyn, G. fairgunja; F. 188.

híell (i, y), ON. hjalli: cp. L. ex-cel-sus *and* κέλομαι; F. 70.

híerde (i, éo, io, y), G. hairdeis, ON. hirðir: cp. Lithuan. kerdzus; F. 80.

íerre (éo, y), OS. irre, G. aírzjis, L. error; F. 26.

síex (éo, i, e), G. saihs, OS. sehs, ON. sex, L. sex; F. 328.

smíerian, smervian (e, y), ON. smyrja, OHG. smirwen: cp. sméorn; F. 357.

wíersa (i, y), ON. verri, G. vaírs, OHG. wirs: cp. ON. vörr; F. 296.

wíercan (e, i, éo), ON. verka, OHG. werchōn; F. 292.

wíerþian (y, u, éo), ON. virþa: cp. OE. wéorþ; F. 290.

E. — OE. *íé* is to be distinguished from *íe,* though the manuscripts do not mark the difference, and in the later history of the language they are often confused, as are *éa* with *eá* and *éo*

with *eó*. The sound *ié* is produced from OE. *e* (and perhaps from *i*), whatever its origin, by a preceding *c*, *g*, or *sc*. Examples of *ié* from OG. *a* are given in the article on that vowel (Transactions, Vol. XII. pp. 78, 79). For OG. *e* we find *ié* (together with *i*, *y*, *e*) in giéfan, giétan, I. a.; giéldan, giéllan, giélpan, I. c.; and in the following nouns: —

giéfa (i, éo), ON. gjafi, OHG. gebo; F. 100. *From* giéfan.
giéft (i, y), ON. gipt, OHG. gift; F. 100. *From* giéfan.
giéfu (y, i), ON. gjöf, G. giba, OHG. geba; F. 100. *From* giéfan.
giéld (i, y), ON. gjald, G. gilda-, OHG. gelt; F. 105. *From* giéldan.
giélp (i, y, e), ON. gjalpr, OHG. gelph; F. 105. *From* giélpan.
giéstrandæg (i), OHG. gestoron, G. gistra-, ON. gær; F. 108.

SECTION III.

The OE. *i*, *e*, *ie*, *ié*, *éo*, *éa*, *æ*, *eá*, in NE.

A. — OE. *i* is represented by the sounds *ī*, *i*, *e*ᵃ, *ai*, *ǫ*ᵉ, and perhaps *o*, *u*, and by the letters *i*, *e*, *ea*, *ce*, *ie*, *u*.

The spelling is largely dependent on the sound. When this is *ai* or *ī*, the spelling is *i*, except in *sieve*, and when final, *-ly*, *hie*, *lie*; but cp. *I*. For the sound *e*ᵃ we find *e*, while the doubtful cases with the sounds *u* and *o* are spelled *ew*, except *hue*. Greater irregularity occurs with the sounds *i* and *o*ᵉ: *i* appears as *ie* in *shield*, *yield*, as *ea* in *yeast*, as *e* in *these*, and as *ee* in *weevil* and *week*; and *ǫ*ᵉ has the spelling *i* in *bird*, *mirth*, *third*, *e* in *her*, and *u* in *much*, *run*, *such*.

1. OE. *i* has regularly the sound *ī* in NE. The examples are: —

Before mutes:

gripe, grip.
lippa, lip.
scip, ship.
-scipe, -ship.
slipor, slippery.
cribb, crib.
ribb, rib.
sipp, gos-sip.
ætwiten (part.), twit.
bite, bit.
biten, bitten.
biter, bitter.
hwit, whit.
hit, it.
sciten (part.), shit.
sittan, sit.
sliten (part.), slit.
smiten, smitten.
witan, wit.
gewitt, wit.
writen, written.
biddan, bid.
biden, bidden.
hider, hither.
hlid, lid.
hwiðer, whither.
to-middes, midst.
riden, ridden.
sliden, slid.
striden, stridden.
þider, thither.
widowe, widow.
bicce, bitch.
cwic, quick.
ficol, fickle.
ficce, fitch.
gicel, icicle.

hwilc, which.
-lic, -ly.
liccian, lick.
pic, pitch.
prician, prick.
six (íe, éo), six.
betwix, betwixt.
þicce, thick.
wicce, wick.
twig? twig.

Before fricatives:

clif, cliff.
drifen, driven.
gif, if.
gifan (ié), give.
gift (ié), gift.
lifian, live.
lifer, liver.
scrift, shrift.
sife, sieve.
siftan, sift.
swift, swift.
fiðele, fiddle.
pið, pith.
smið, smith.
wið, with.
biscōp, bishop.
bliss (blīðs), bliss.
cristnian, christen.
disc, dish.
fisc, fish.
his, his.
hwisprian, whisper.
hwistlian, whistle.
is, is.
list, list.
mis-, mis-.
missan, miss.
mist, mist.
misteltā, mistletoe.
risen, risen.
þis, this.
þistel, thistle.
wlisp, lisp.
wrist, wrist.

Before *l* (not *r*):

bill, bill.
cildru, children.
filmen, film.
gildan (ié), gild.
hilt, hilt.
scilling, shilling.
spill, spillan.
stille, still.
tilian, till.
willa, will.
wilig, willow.

Before nasals:

bringan, bring.
binn, bin.
cinn, chin.
clingan, cling.
cringan, cringe.
drincan, drink.
finger, finger.
finn, fin.
flint, flint.
beginnan, begin.
hring, ring.
in, in.
-ling, -ling.
lind, linden.
minte, mint.
scin, shin.
scrincan, shrink.
sinder, cinder.
sincan, sink.
singan, sing.
slincan, slink.
slingan, sling.
spindel, spindle.
spinnan, spin.
springan, spring.
stingan, sting.
stincan, stink.
stintan, stint.
swingan, swing.
tinn, tin.
twinclian, twinkle.
getwinnan, twins.
þing, thing.
wincan, wink.
wind, wind.
winnan, win.
windwian, winnow.
winter, winter.
wring, ring.
dimm, dim.
grimm, grim.
him, him.
lim, limb.
rima, rim.
swimman, swim.
timber, timber.

2. OE. *i* has the sound *i* in the following words: scild, *shield*, gildan, *yield*, gist, *yeast*, *þise, *these*, wifel, *weevil*, wicu, *week*.

The first three owe the peculiar form to the *g* and *sc*, which can change OE. *i* to *ié*, though we have frequent cases in *i* where the pronunciation is regular; e. g. scin, scilling, cildru, cinn, gifan, gild. *These* is a word in which there is much confusion in ME. Cp. Skeat, Etym. Dict., 637, and Stratmann, ME. Dictionary, 587. The last two words are irregular: cp.

witan, widowe, cwic, wicce, swift, wið, willa, wilig, and others which show the regular sound after *w*.

3. OE. *i* has the sound *e*[a] in NE. in the following words. In every case but one, *nether*, it is due to the spelling *ié* (see III. C). The words are: gillan, *yell*, gilpan, *yelp*, gise, *yes*, gistrandæg, *yesterday*, git, *yet*, gitan, *get*, niþor *nether*.

4. OE. *i* has the sound *ai* in NE. in the following words: —

Initial:

ic, I.
ifig, ivy.

Before *h* + consonant:

briht, bright.
cniht, knight.
miht, might.
niht, night.
pliht, plight.
riht, right.
siht, sight.

Before *ld*:

cild, child.
mild, mild.
wild, wild.

Before *nd*:

bindan, bind.
blind, blind.
findan, find.
grindan, grind.
hinde, hind.
hinderna, hindermost.
rind, rind.
windan, wind.

Before absorbed *g*:

licgan, lie.
higian, hie.
frigedæg, friday.
nigon, nine.
tigel, tile.

Other cases:

scire (? scīr), shire.
Crist, Christ.
climban, climb.

5. OE. *i* has the sound *ę*[e] in the following words: bridd, *bird*, hire, *her*, sceāphirde (íe), *shepherd*, mirhð, *mirth*, þridda, *third*, micel, *much*, rinnan (éornan), *run*, swilc, *such*. In the first five cases and in *run* the sound is due to *r*; in *such*, to the preceding *w*. *Much* is irregular and unexplained.

6. The following words are also to be noted, though the NE. forms may have come from the secondary OE. form *ēo*. There are four words with the sound *u*, and one with the sound *o*.

With the sound *u*: niwe (nēowe), *new*, cliwe (clēo), *clew*, hiw (hēo), *hew*, Tiwesdæg (Tēowes-), *Tuesday*.

With the sound *o*: siwian (sēowian), *sew*.

Phonetic Analysis. — The words *shield*, *yield*, *yeast*, *yesterday*, *yell*, *yes*, *yet*, *get*, *yelp*, show evidence of the old spelling *ié*, (see III. B, C,) and are treated as if spelled with *e* in OE., except *yeast*. Leaving these aside, *i* is the regular equivalent of OE. *i*, except as follows: —

1. In anlaut we have always *ai*; also in monosyllables before *ld* (ex. guild), *nd* (ex. wind, *noun*), *mb*, *h*, *g* (ex. *twig*, which is hardly OE. but rather from the Swedish), *ht*.

2. Before *r*, and after *r* in *run* = *urn*, we have *o*ᵉ (ex. *shire*, which, however, is rather to be derived from OE. *scīr*).

3. After *w* we have *i* sometimes, and when the *w* is absorbed, *ǫ*ᵉ (*such*). Before *w*, OE. *i* may become *ēo*, and this gives the sound *u* (*new*), and when OE. *ēo* changes its accent to *eō* the sound is *o* (*sew*).

4. Other irregularities are *nether*, due perhaps to the dissyllable; *Christ*, due perhaps to foreign influence; and *much*.

B. OE. *e* in NE. is represented by the sounds *i*, *ị*, *e*, *e*ᵃ, *æ*, *a*, *ǫ*, *ǫ*ᵉ, and by the spellings *i*, *e*, *ie*, *ea*, *a*, *ai* (*ay*), *u*. The spelling depends largely on the sound. The sound *e*ᵃ is represented by *e* except before *r* and *-ther*, where we have *ea* usually, once however *ai* (*lair*) and *a* (*mare*); the usual spelling is found also in *wether*, cp. *weather*. Other exceptions to the rule are *stead*, *heavy*, *Thames*, *tread*, *wreak*. The sound *e* is represented by *ai* and when final by *ay*, except in *thane*, *break*, *ache*. The sounds *ị* and *ǫ*ᵉ are represented by *i*, except in *England*, *English*, and *stern*. The sound *i* is spelled *ea*, except in *even*, *fever*, *mere*, and *field*, *wield*. The sounds *æ*, *a*, *ǫ*, are always represented by *a*.

1. OE. *e* has the sound *e*ᵃ in NE. in the following words:—

Before mutes:

pepor, pepper.
steppan, step.
ebbian, ebb.
webb, web.
betera, better.
cetel, kettle.
fetor, fetter.
lettan, let.
nett, net.
netele, nettle.
settan, set.
setlian, settle.
hwettan, whet.
bedd, bed.
bedegian, beg.
stede, stead.
tredan, tread.
wedd, wed.
wedor, weather.
feccan, fetch.
hnecca, neck.
recenian, reckon.
streccan, stretch.
wrecan, wreak.
wrecca, wretch
ecg, edge.
hege, hedge.
leger, lair.
secg, sedge.
wecg, wedge.

Before fricatives:

hefig, heavy.
eft, eft.
feðer, feather.
leðer, leather.
weðer, weather.
besma, besom.
best (betst), best.
cest, chest.
cresc, cress.
fresc, fresh.
gest(æ), guest.
nest, nest.
rest, rest.
þrescan, thresh.
west, west.

Before liquids:

belle, bell.
belgan, bellow.
belg, bellows, belly.
belt, belt.
cwellan, quell.
delfan, delve.
eldest (íe), eldest.
elf (íe), elf.
elles, else.
elm, elm.

eln, ell.
fell, fell.
fellan, fell.
gelpan (ié), yelp. See *i*.
helfa (íe), helve.
hell, hell.
helm, helm.
helpan, help.
hwelp, whelp.
meltan, melt.
seldan, seldom.
self, self.
sellan, sell.
scell, shell.
scelfe, shelf.
smeltan, smelt.
spellan, spell.
swellan, swell.
tellan, tell.
twelf, twelve.
wel, well, *adv.*
well, well, *noun.*
welsc, Welsh.
beran, bear.
bera, bear.
berige, berry.
leger. See under *g*.
mere, mare.
merg, merry.
swerian, swear.
teran, tear.
werian, wear.

Before nasals:

emtig, empty.
stemn, stem.
Temese, Thames.
benc, bench.
bendan, bend.
blendan, blend.
cennan, ken.
cwencan, quench.
denn, den.
drencan, drench.
ende, end.
endlufan, eleven.
fenn, fen.
frencisc, French.
henne, hen.
hrendan, rend.
*lengðo, length.
menn, men.
pening, penny.
sendan, send.
spendan, spend.
stenc, stench.
strengðo, strength.
wencle, wench.
wendan, wend.
wenn, wen.

2. OE. *e* produces in NE. the sound *i* in the following cases:—

Before mutes:

hebban, heave.
etan, eat.
mete, meat.
cnedan, knead.
gebed, bead, beadle.
medu, mead.
hlece, leak.
sprecan, speak.

Before fricatives:

cweðan, bequeathe.
wesle, weasel.
efen, even.
efese, eaves.
fefer, fever.
wefan, weave.

Before liquids:

erian, ear.
mere, mere.
sceran, shear.
smerian, smear.
spere, spear.
wer, weir.
feld, field.
melu, meal.
stelan, steal.
wela, weal.

Before nasals:

cwene, quean.
wenian, wean.

3. OE. *e* is pronounced *e* in NE. in the following words. All but *ache* and *break* are before OE. *g*.

blegen, blain.
brecan, break.
bregdan, braid.
bregn(æ), brain.
ece, ache.
eglian, ail.
lecgan, lay.
gelegen, lain.
plegan, play.
regn, rain.
secgan, say.
segel, sail.
twegen, twain.
þegn, thane.
weg, way.
wegan, weigh.

4. OE. *e* has the sound *i* in NE. in

nebb, nib.	cwellan, kill.	hlence, link.
ahreddan, rid.	England, England (also e^a).	sengan, singe.
sprec, sprig.	Englisc, English (also e^a).	þencan, methinks.

5. OE. *e* has the sound *æ* once only: *thrash*, OE. þrescan, pronounced also and more regularly in NE. *thresh* (e^a).

6. OE. *e* has the sound *a* in NE. in the following words, always before *r*: —

bere, barley.	merran (íe), mar.	teru (éo), tar.
bern (bere-ærn), barn.	mersc (mer-isc), marsh.	

7. OE. *e* takes the sound *ǫ* in NE. sometimes before *w*. The cases are swelgan, *swallow*, wesp, *wasp*.

8. OE. *e* takes the sound $ǫ^e$ when in an unaccented final syllable, as þe, *the*, in rapid pronunciation.

Phonetic Analysis. — When final, we have e^a and $ǫ^e$ according to the accent; when initial, the sound is *i*, except in *ache*; when medial, the sound is e^a, except as mentioned below.

1. An OE. *g*, when absorbed into the vowel, gives *e* in NE.; where the *g* remains, we have e^a, and so too in OE. leger, *lair*.

2. Before NE. *v*, and often, though not regularly, before *l* and *r*, the sound *i* is used for e^a. The sounds *ị* and *i* occur also before the mutes *d*, *t*, *k*, where we should expect e^a. Analogy of words with OE. *i* occasionally produces the sound *ị* in place of e^a before *n* + consonant. The other exceptions are wholly isolated.

C. — OE. *íe*, *ié*, may be treated together; for though *íe* is regarded as *i*, and *ié* as *e*, yet by change of accent, which is frequent in all ME. diphthongs, the two sounds are often confused, and in NE. the result is a complete union of the sounds, as will appear below.

1. ié.

Before mutes:

giét, yet.
giétan, get.

Before fricatives:

giéf, if.
giéfan, give.
giéft, gift.
giése, yes.
giést, yeast.
giéstrandæg, yesterday.

Before liquids:

giéldan, yield.
giélpan, yelp.
giéllan, yell.
sciéld, shield.

2. íe.

híelfa, helve.
íeldra, elder.
wíeldan, wield.
fíerst, first.
gíerd, yard.
gíerdel, girdle.
gíerdan, gird.
híerde, herd.
míerran, mar.
smíeran, smear.
smíercan, smirk.
wíersa, worse.
wíercan, work.

Phonetic Analysis. — OE. *ié* corresponds to *e* in all cases, except *if, give, gift,* where the forms go back to OE. *i*. *Yeast, yield, shield,* offer slight irregularities in either case, though they have some analogy under both *i* and *e*. OE. *ie* produces, as a rule, *ǫ*ᵉ before *r* + consonant, which is regular. See *i*, III. A, 5; but *yard, mar,* and *smear* are influenced by analogy, and treated like words with *e;* see III. B, 6, 2. Before *l* + consonant we have *i* and *e*ᵃ according to the analogy of *e;* see III. B, 2, 1.

D. — OE. *éo* is represented in NE. by the sounds *ị, i, e*ᵉ, *æ, ai, a, o*ᵃ, *o, ǫ, ǫ*ᵉ; *o* and *ǫ*, however, occur only where the OE. accent has been changed in ME. from *éo* to *eó:* géolca, *yolk,* géond, *beyond.*

The spelling depends largely on the pronunciation; *i* is used for the sounds *ị, ai,* regularly, and also for the sound *ǫ*ᵉ in *birch; e* is used for *e*ᵃ except in *read, heaven,* and also for *ǫ*ᵉ in *swerve, iceberg; ea* is used for *i* always, often for *ǫ*ᵉ (*earth, earl, earnest, hearth, learn*), and by exception for *e*ᵃ (*read, heaven*) and *a* (*heart, hearth*); *a* is used for *æ, a,* and *o*ᵃ, except *heart, sword,* and *hearth* (also pr. *ǫ*ᵉ); *o* is used for *o* and *ǫ*, and sometimes for *ǫ*ᵉ (*work, worth, world*); *u* is used for *ǫ*ᵉ in *burn, burst, churl, spurn.* There is reasonable regularity except in the letters for *ǫ*ᵉ, which sound is spelled *i, e, ea, o, u.*

1. OE. *éo* becomes *ị* in the following cases: séolfer, *silver,* séolc, *silk,* méolc, *milk,* swéoster, *sister,* wéoca, *wick.*

2. OE. *éo* becomes *i* in benéoþan, *beneath,* séolh, *seal,* béofer, *beaver.*

3. OE. *éo* becomes *e*ᵃ in the following: —

héofon, heaven.	séofon, seven.	géolwa, yellow.
léort, let.	hwéoloc, whelk.	géolc, yelk, *and* yolk (*ǫ*).
réord, read.		

4. OE. *éo* becomes *æ* in béorg, *barrow,* and perhaps éom, *am,* though the original spelling of this word is doubtful.

5. OE. *éo* becomes *ai* in féohtan, *fight.*

6. OE. *éo* becomes *a* in the following words, always before *r:* —

béorma, barm.	féor, far.	stéorfan, starve.
béorcan, bark.	héorot, hart.	stéorra, star.
céorfan, carve.	héorte, heart.	téoru, tar.
déorc, dark.	héorð, hearth. See 9.	

7. OE. *éo* becomes o^a sometimes after *w*. There are two cases, dwéorg, *dwarf*, swéord, *sword*.

8. OE. *éo* changes its accent to *eó*, and thus produces *o* in géolca, *yolk*, and *ǫ* in begéond, *beyond*.

9. OE. *éo* becomes $ǫ^e$ usually before *r* + consonant; but see 6. The cases are: —

béorc, birch.	éorl, earl.	spéornan (u), spurn.
béorg, iceberg.	éornest, earnest.	swéorfan, swerve
béornan, burn.	éorðe, earth.	wéorc, work.
béorstan, burst.	héorð, hearth. See 6.	wéorld, world.
céorl, churl.	léornian, learn.	wéorð, worth.

The phonetic analysis of this OE. sound presents many difficulties. No difference in nature is apparent between 6 and 9, and 7 should follow the analogy of 9. The change of accent in 8 is observable also in words with *éa, íe, eá, ié*, which see, and also in the long diphthongs. 5 shows the usual result of absorbed *h*. 4 is isolated. The distinction between 1, 2, and 3, causing the difference in treatment, is hard to trace.

E. — OE. *éa* is found in NE. with the sounds *i, e,* e^a, *æ, a,* o^a, *o, ǫ,* $ǫ^e$. The spellings are *e, ea, a, o, au, aw, ou*. The spelling depends on the sound: *i* and $ǫ^e$ are spelled *ea*; *e,* e^a, *æ, a,* o^a, *ǫ*, are spelled *a*, the only exceptions being *eight, play, belch, laugh, laughter, saw, fought*, the last four due to following *h* in OE., which is absorbed into the vowel sound in NE. The sound *o* is always spelled *o*.

There is confusion in ME. and NE. between *éa* and *eá*, as between *éo* and *eó* (III. D). Usually *eá* is treated as *a*; but where the OE. has an alternative form with *æ*, as, for instance, *cæf* for *ceáf*, the NE. is developed from this form; e. g. chaff, slack, shaft. *Eá* is treated as *éa* in *shall, shadow*, and in *gall, chalk*, if these should be spelled with *eá* rather than *éa*, as seems probable. In one word only, *got*, preterite for older *gat*, OE. geát, *eá* shows an independent, and at the same

time anomalous development, due to the analogy of the participle.

1. OE. *éa* has the sound *i* exceptionally in béard, *beard*, géara, *year*. See 5 and 3 for the regular forms.

2. OE. *éa* has the sound *e* in

éatha, eight.	béalu, ball.	sléagen, slain.
éalu, ale.	scéalu, scale.	See F. 2.

3. OE. *éa* has the sound e^a in béalcettan, *belch*, déar, *dare*, shéare (? *eá*), *share*.

4. OE. *éa* has the sound *æ* in

céalwa, callow.	géalga, gallows.	séalwe, sallow.
éax, axe.	héarwe, harrow.	spearwa, sparrow.
éaxl, axle.	méalwe, mallow.	téalg, tallow.
éalswa, as.	méarg, marrow.	wéax, wax.
fléax, flax.	néarwe, narrow.	wéaxan, wax.
féalwe, fallow.	séalfian, salve (pr. also *a*).	

And perhaps *éam*, though this appears also as *éom*, and may be long (*ēa* or *ēo*). Add also (*eá* = *éa*) sheál, *shall*, sceádwe, *shadow*.

5. OE. *éa* has the sound *a* in

céalf, calf.	héard, hard.	péarruc, park.
éarc, ark.	héalf, half.	séalfian, salve. See 4.
éars, arse.	héarpe, harp.	pséalm, psalm.
éart, art.	héarm, harm.	scéarp, sharp.
éarm, arm.	hléahan (hlíehhan), laugh.	spéarca, spark.
géard, yard.	hléahtor, laughter.	stéarc, stark.
géarn, yarn.	méarc, mark.	téart, tart.

6. OE. *éa* has the sound o^a in

béalca, balk.	héall, hall.	swéart, swarthy.
céalca, chalk.	héalm, halm.	wéalcan, walk.
éall, all.	séah, saw.	wéall, wall.
féallan, fall.	stéalcan, stalk.	wéard, ward.
féaht, fought.	stéall, stall.	wéarm, warm.
géalle, gall.	swéarmian, swarm.	wéarnian, warn.

7. OE. *éa* has the sound *o* before *ld*: —

béald, bold.	féaldan, fold.	séalde, sold.
céald, cold.	héaldan, hold.	téalde, told.
éald, old.		

8. OE. *éa* has the sound *ǫ* in

héalt, halt.	séalt, salt.	wéalwian, wallow.
méalt, malt.	swéalwe, swallow.	éaldorman, alderman.

9. OE. *éa* has the sound *ǫ*ᵃ before *rn* in éarnian, *earn*, féarn, *fern*.

A phonetic analysis shows many difficulties. Before *r* the regular sound is *e*ᵃ; before *r* + consonant, *a*, which a preceding *w* seems sometimes to change to *o*ᵃ. When an OE. *w* or *g* in the following syllable has produced *ow* in NE., the *éa* takes the sound *æ*. *Year*, *beard*, *earn*, *fern*, remain however to be explained.

Before *l* we have *o*ᵃ, but before OE. *lu* = NE. *le* we have *e*. *Lw*, *lg*, like *rw*, give *æ*, which a preceding *w* may change to *ǫ*. The sound before *l* + consonant is very various; *ld* produces *ǫ*; *lt* gives *o*; *lm*, *lc*, give *o*ᵃ, and when *l* is absorbed we have *a*. Unexplained are *as*, *belch*. An absorbed *h* or *g* gives *e*. OE. *hs* or *x* is preceded by the sound *æ*.

F. — OE. *æ* develops in NE. the sounds *i*, *e*, *e*ᵃ, *æ*, *a*, *o*ᵃ, *o*, *ǫ*, which are spelled *e*, *ei*, *ea*, *a*, *o*. The spelling depends on the sound. The sound *i* is spelled *ei* and *ea* (*either*, *least*); *e* is spelled *ai*, *ay*, where a *g* has been absorbed, otherwise always *a*; the sound *e*ᵃ is spelled *a* before *r*; where *g* is absorbed, *ai*; elsewhere *e*; the sounds *æ*, *a*, *ǫ*, and *o*ᵃ are spelled *a*; *o* is spelled *o*. The spelling is therefore unusually regular, and the words have appeared for the most part already in the paper on the "*a*-Vowel" (Transactions, XII. 84, 85).

1. OE. *æ* has the sound *i* in æghwæder, *either*, læst, *least*. The regular spelling of *either* would be *ai* and the sound *e*; *least* should be spelled and pronounced *a*.

2. OE. *æ* is pronounced *e* where a *g* has been absorbed before *l*, *v*, *z*, and sometimes before mutes. It fails to occur in *said*, *small*, and *clover*.

The examples are: —

Before absorbed *g*:	mægð, maid.	tægl, tail.
dæg, day.	hægl, hail.	brægn, brain.
læg, lay.	nægl, nail.	flægen, flay.
mæg, may.	snægl, snail.	mægn, main.

ongægn, again. Also pron. *eᵃ*; see 2.
fægn, fain.
slægn, slay.
wægn, wain.

Before *l*:

dæl, dale.
hwæl, whale.

Before OE. *s* = *z*:

hæsl, hazel.

Before OE. *f* = *v*:

græf, grave.
hæfn, haven.
hræfn, raven.

Exceptionally before mutes:

blæd, blade.
bræc, brake.
spræc, spake.
æcer, acre.
æcern, acorn.

3. The sound *eᵃ* is regular before *r* and absorbed *g* + *r*. It occurs also in several other cases.

The examples are: —

Before *r*:

bær, bare, *adj.*
bær, bare, *verb.*
wær, ware.

Before *gr*:

fægr, fair.

Exceptionally:

-naes, Shoebury-ness.

ongægn, again. Also pron. *e*.
sægde, said.
togædre, together.
hwædre, whether.
wræc, wreck.

4. The sound *æ* is regular before mutes. It occurs also in *hath* (*has*, *have*, *had*), *gather*, *fathom*, and fails to occur in *blade*, *brake*, *spake*, *wreck*, and in *watch*, *water*, *what*. The examples are: —

Before mutes:

æpl, apple.
hnæppian, nap.
sæp, sap.
wægn, wagon *and* wain.
bæc, back.
blæc, black.
sæc, sack.
slæc, slack.
þæc, thatch.
ædese, adze.
sæd, sad.
scæd (sceád), shadow.
glæd, glad.
nædre, adder.
blædre, bladder.
æt, at.
fæt, vat.
gnætt, gnat.
hætt, hat.
lætre, latter.
sæt, sat.
sæterdæg, Saturday.
þæt, that.

Before fricatives:

hæð, hæfde, hath, had.
æsc, ash.
æspen, aspen.
fædm, fathom.
gædrian, gather.

5. OE. *æ* is pronounced *a* before *r* + consonant and all fricatives except NE. *v*, *z*. It occurs also in *alms*, *father*, but fails to occur before fricatives in *ash*, *aspen*, *fathom*, *gather*, *hath*, *together*, *was*, *whether*, *-ness*, *either*, *least*. The examples are: —

Before fricatives:

cæf (and ceáf), chaff.
stæf, staff.
æfter, after.
cræft, craft.
scæft, shaft.
bæð, bath.
pæð, path.
fæder, father.
hræðer, rather. Also pron. *o*.

	Before r + consonant:	Isolated:
græs, grass.	hærfest, harvest.	ælmern, alms.
glæs, glass.	ærce, arch.	
bræs, brass.	cært, cart.	
fæst, fast.		
mæst, mast.		

6. OE. *æ* is pronounced o^a in smæl, *small*, and wæter, *water*, both unexplained.

7. OE. *æ* is pronounced *o* only in clæfre, *clover*, which is unexplained. The word does not occur in ME.

8. The sound *ǫ* *may* occur after *w* for the sounds *æ* and *a*. For example, wæcce, *watch*, hwæt, *what*, wæs, *was*; but compare *ware*, *whale*, *wain*, *whether*, *water* (2, 3, 6).

Phonetic Analysis.—The normal development before mutes is *æ*, which occurs 23 times; we have *e* initial, and in two strong preterites, which may point to the plural forms with *ǣ*, cp. *ate*, OE. æt, pl. æton; we find *e* also in *blade*, which is irregular, cp. *glad*. *Wreck* has e^a for the regular *æ*, perhaps owing to the *r*. Initial *w* causes the change to *ǫ* in *what* and *watch*, and to o^a in *water*.

Before fricatives, except *v*, *z*, the regular sound is *a*, but there is great irregularity. *Either*, *least*, have *i*; e^a occurs in *together*, *whether*, perhaps owing to the dissyllable, and in the unaccented *-ness*. *æ* occurs twice where the OE. mute has become a fricative, *fathom*, *gather*, and also in *hath*, *ash*, *aspen*. *W* causes the *ǫ* in *was*. Before *v* or *z*, *e* is used; *clover* is unexplained.

Before liquids. *L* causes the sound *e* except in *alms* and *small*; *r* produces e^a, *r* + consonant, *æ*.

Where *g* is absorbed, the result is *e*, except in *said*, *again*, which are usually pronounced with e^a, though *e* is sometimes heard.

SECTION IV.—NE. SOUNDS IN OE.

The NE. sounds which are to be considered here are *ị*, e^a, *e*, *æ*. The long sound *i* is not spoken of here, because it is derived in the large majority of cases from OE. long vowels; but *e*, though a long sound, is treated of, because most of the words with this sound are from OE. words with short vowels.

A few words in regard to the sound *i* may however be added here. We have already found it used for OE. *i* in six cases (see III. A, 2); for *e* in 25 cases (see III. B, 2); for *ié* in *yeast, yield, shield* (see III. C); for *éo* in *beneath, seal;* for *éa* in *beard, year;* for *æ* in *either, least;* and for *y* in *evil, weird*;—in all, for short vowels in 39 cases. It is used for *ī* 3 times, for *ȳ* once, for *ēo* 35 times, for *ēa* 29 times, for *ē* 54 times, and for *æ* 42 times,—in all, for long vowels, 164 times. This sound, together with *o*ᵃ, *o*, *u*, *ǫ*, *ǫ*ᵉ, *ǫ*, and the diphthongs *ai* and *au*, will be treated of in connection with the OE. vowels *o*, *u*, *y*. The sound *oi* occurs only in words of foreign origin.

A.—NE. *i* is used for the OE. vowels *i*, *ī*, *y*, *ȳ*, *e*, *ē*, *æ*, *ēa*, *ēo*, *u*. The spelling is always *i* except in *been*, which is also sounded *i*, in *England, English*, which are better pronounced *e*ᵃ, and in *busy, women, build, guilt, sieve, -ly*.

1. NE. *i* is used for *i* in 138 cases given in III. A, 1; for *e* in 9 cases given in III. B, 4; for other sounds as follows:—

2. NE. *i* for OE. *y*. In ME. *y* lost its original sound and was treated sometimes as *u*, but usually as *i*,—a change to which the sound of the Modern and old Greek *v* may be compared. OE. *y* corresponds to *i* 38 times, to *ǫ*ᵉ 21, to *ai* 8, and to *i* and *e*ᵃ twice. The following words have *i* for OE. *y*:—

bridge, brycg.	inch, ynce.	pit, pytt.
build, byldan.	kin, cynn.	ridge, hrycg.
busy, bysig.	king, cyning.	sill, syll.
chicken, cycen.	kiss, cyssan.	sin, synne.
clip, clyppan.	kitchen, cycene.	spit, spyttan.
did, dyde.	knit, cnyttan.	thrill, þyrlian.
din, dyne.	lift, lyftan.	thin, þynne.
dint, dynt.	list, lystan.	think, þyncan.
dip, dyppan.	little, lytel.	thick, þycce.
fill, fyllan.	midge, mycg.	tinder, tynder.
gild, gyldan.	mill, mylen.	trim, trymman.
guilt, gylt.	mint, mynet.	vixen, fyxen.
hill, hyll.	minster, mynster.	

An examination of the other cases of OE. *y* will show that this is the regular sound except before *h*, *g*, where we have *ai*, and before *r*, where we find *ǫ*ᵉ except in *bury, weird*. The exceptions are *evil, cluster, bundle, comely, crutch, shuttle, shut*.

3. NE. *ị* for OE. *u* occurs only once, hup, *hip*, which is exceptional, the regular sound for *u* before mutes being *ọ*[e].

4. NE. *ị* is used for *ī, y, ē, ǣ, ēa, ēo*, as stated in detail in my article on the "Development of OE. Long Vowels," in Anglia, VII. 203. I give here the NE. words only. For *ī*, in *ditch, fifty, linen, rich, stiff, stirrup, width, wisdom, women.* For *ȳ*, in *filth, fist, hid, kith, wish.* For *ē*, in *breech, chill, cripple.* For *ēa*, in *garlic, rick, nickname.* For *ēo*, in *been* (also pronounced *i*), *hip-rose, sick.* For *ǣ*, in *riddle, silly.*

We have then this sound used 177 times for OE. short vowels and 24 times for long vowels, nearly always before double consonants or in dissyllables.

B. — The sound *e* is used in NE. for OE. *e, ē, éa, ēa, eá, eā, æ, ǣ, a, ā.* The spelling is *a*, except *break, great.* Where *h* or *g* is absorbed, the spelling is *ai*, except *eight, thane, neigh, weigh* (*weight*), *whey.* When final, *ay* is used for *a* except in *yea.*

1. The use of NE. *e* for OE. *e*, 17 cases, is treated in III. B, 3; for *éa*, 5 cases, see III. E, 2; for *eá*, 51 cases, see Transactions, XII. 81; for *æ*, 27 cases, see III. F, 2; for *y*, in *weird*, OE. *wyrd.* In all, for short vowels in 101 cases.

2. The use of NE. *e* for *ē, ēa, eā, ǣ, ā*, is given in detail in Anglia, VII. 203 ff. I give here the NE. words only. For *ē*, *hay;* for *ēa, great, neighbor;* for *eā, ā, yea, hale;* for *ǣ, ate, clay, gray, lady, neigh, whey.* In all, for long vowels in 13 cases.

C. — NE. *e*[a] is used for OE. *i, ié, īe, e, ē, éo, ēo, éa, ēa, æ, ǣ, a, eā, o, ō, y.* The spelling is regularly *e*, for which, however, *ea* occurs in many words, without regard to the OE. sound; these are, *bear, bear, bread, breadth, breath, breast, cleanse, dead, deaf, death, dread, feather, head, heaven, heavy, health, lead, leather, read, stead, sweat, tear, thread, threat, tread, weapon, wear, weather, wreak.* The final consonants are, *d* 9 times, but cp. *bed, red; t* twice, *c* once, *f* once, *th* twice, *r* 4 times, double consonants or a syllable 10 times, but in no case regularly. Isolated irregularities are *any, many, Thames, friend, heifer, guest.* The *u* in *guest*, however, can hardly be considered a vowel.

Where *g* is absorbed, the spelling is *ai.*

Before *r*, *a* takes the place of OE. *a*, *éa*, *æ*; but for OE. *e* we have *ea*, and for *ǣ*, *e* (except *hair*); *merry*, OE. merg, owes its *e* to the dissyllable; *bury* is irregular and isolated.

There are in all 198 cases; 147 are spelled with *e*, 29 with *ea*, 13 with *a*, 5 with *ai*, and one each with *ei*, *ie*, *u*, *ue*.

1. In NE. the sound e^a is used for OE. *i*, *ié*, 7 cases (see III. A, 3); for *e*, 114 cases (see III. B, 1); for *éo*, 7 cases (III. D, 3); for *éa*, 3 cases (III. E, 3); for *æ*, 10 cases (III. F, 3); for *a*, 6 cases (Transactions, XII. 81); for *o* in *welkin*, OE. wolcnu; for *y* in *bury*, OE. bebyrgan, *fledged*, OE. flycge. In all, 150 times for short vowels.

2. The sound e^a is used for the long vowels *ē*, *ēo*, *ēa*, *eā*, *ǣ*, *ō*, as shown in detail in Anglia, VII. 203 ff. Here only the NE. words are given. For OE. *ē* (*īe*): *bled*, *bred*, *brethren*, *bless*, *beckon*, *depth*, *fed*, *felt*, *friend*, *kept*, *let*, *met*, *next*, *reck*, *ten*, *theft*, *twenty*, *wept*, — 18. For OE. *ēo*: *breast*, *devil*, *held*, *shed*, *swept*, (*weft*, *left*, are to be regarded as from wēfan, hlēafan,) — 5. For OE. *ēa*: *bereft*, *bread*, *dead*, *deaf*, *death*, *head*, *heifer*, *lead*, *left*, *red*, *shred*, *threat*, — 11. For OE. *ǣ*: *breath*, *breadth*, *dread*, *ere*, *hair*, *there*, *thread*, *were*, *where*, *wren*, *wrest*, — 11. For OE. *eā*, in *shed*, *shepherd*, — 2. For OE. *ō*, in *Wednesday*. In all, 48 times for long vowels.

D. — In NE. the sound *æ* is used for OE: *e*, *ē*, *éo*, *éa*, *ēa*, *eá*, *æ*, *ǣ*, *a*, *ā*, and occurs in 105 cases, always with the spelling *a*. A list of these is found in the "*a*-Vowel," Transactions, XII. 81, 84. See also Anglia, VII. 203 ff.

1. The sound *æ* is used for OE. *e* in *thrash*, OE. þerscan; for *éo* in *barrow*, OE. béorg; for *éa* in 18 words (see III. E, 4); for *eá* twice (see III. E, 4); for *æ* 29 times (see III. F, 4); for *a* 47 times (see Transactions, XII. 81). In all, for short vowels 96 times.

2. The sound *æ* is used for OE. *ē* in bramble, *brēmel*; for *ēa* in chapman, *cēapmann*, chaffer, *cēapfaru*; for *ǣ* in clad, *geclǣðed*, fat, *fǣtt*, ladder, *hlǣder*, spat, *spǣtte*; for *ā* in hallow, *hālgian*, clammy, from *clām*, or perhaps OE. **clǣmig*, though this does not occur. In all, 9 times for long vowels.

SECTION V. — NE. LETTERS IN OE.

The NE. letters that fall within the scope of this study are *i, e, y,* and the gemminatives and diphthongs *ai, ay, ea, ee, ei, ey, ew, ie, ye.* The NE. signs not considered here are *a,* which has been already treated; *o, u, au, aw, oa, oe, oo, ou, ue, ui,* which will be more properly spoken of in connection with the sounds which they represent; and the following, which occur only in words of French origin: *iew, ieu, eo* (OE. only in *yeoman*), *eu, eau, ao, oi, oy, uoy.* In all there are 32, of which 9 are French only, 10 belong to the consideration of the dark vowel sounds, one is already treated, and 12 are to be treated here.

A. — The letter *i* in NE. has two sounds, *ɨ* and *ai.* The cases of its use for *ɨ,* 193, may be found in IV. A. It is used for *ai* in 26 cases where the OE. vowel is *i* (see III. A, 3), and also for other OE. vowels as follows: for OE. *y,* in *bight, flight, kind, mind, wright.* For OE. *éo,* in *fight.* For OE. *ī,* in *alight, arise, bide, bite, blithe, bridle, chide, drive, file, five, glide, gripe, ice, idle, Ireland, iron, knife, life, like, lime, lithe, mile, mine, pine, ride, rime, ripe, shine, shrine, shrive, side, sigh, slide, slime, smite, stile, strike, swine, tide, time, twine, thine, while, whine, white, wide, wife, wile, wine, wire, wise, write, writhe,* — 53. For OE. *ȳ,* in *bride, defile, dive, fire, hide, hide, hire, -hithe, kine, lice, mice, pride, why,* — 13. For OE. *īe,* in *island, light,* — 2. For OE. *ēo,* in *light, thigh,* — 2.

This letter with the sound *ɨ* is used for long OE. vowels 22 times, and for short OE. vowels 171 times; with the sound *ai* it is used for long OE. vowels 70 times, and for short OE. vowels 32 times. In all, 92 times for long vowels, 203 for short vowels.

B. — The letter *e* in NE. has the sounds *i,* e^a, $ɛ^e$, and is used for OE. *i, e, éa, éo, íe, ié, æ, a, o, y, ī, ē, ēa, eā, ēo, īe, ǣ.*

1. NE. *e* has the sound *i* in the following 12 words; these, however, are always exceptional spellings. The cases are given here with the OE. vowel in parentheses before the word: (*i*) *these,* (*y*) *evil,* (*e*) *even, mere,* (*ē*) *eke, he, me, we, ye,* (*ǣ*) *even,* (*ēo*) *be, she.*

2. NE. *e* has the sound *ę*[e] in the following 10 words, but is never used regularly for this sound. The cases are: (*i*) *her*, (*ie*) *shepherd*, (*e*) *the*, also pronounced with *e*[a], (*éa*) *fern*, (*éo*) *iceberg*, *swerve*, (*y*) *stern*, *kernel*, (*ǣ*) *erst*, *were*, also pronounced *e*[a].

3. The regular use of *e* is for the sound *e*[a]. Its use for this sound has been fully treated in IV. C. The sound is used in 198 words, and is spelled *e* in 147 of them. *Ea* occurs 29 times; *a*, 13; *ai*, 5; *ei*, *ie*, *u*, *ue*, once each.

E occurs then in 169 words, — 125 times for short vowels, 44 times for long vowels.

C. — The letter *y* in NE. has the sounds *ị* and *ai*. It is used for *i* at the end of words, rarely elsewhere. It has the sound *ị* in *-y*, OE. -ig, and *-ly*, OE. -lic, *ivy*, OE. ifig, and *busy*, OE. bysig, all unaccented syllables; and the sound *ai* in (*ī*) *by*, *my*, *thy*, *dyke*, *rhyme*, (*y*) *dry*, (*ȳ*) *sky*, *why*, (*ēo*) *fly* (verb and noun), *shy*. It is not regular even here, however, for we often find *ye* and *ie* in its place. See Anglia, VII. 204, 205, 209.

D. — The letters *ai* and *ay* are medial and final forms of the same sign, and may be treated together. They have the sounds *e*, *e*[a], and in French words *ai*, and correspond to OE. *ǣ* and to OE. *eg*, *æg*, *yg*, *ēg*, *ǣg*, *yg*, and perhaps *ēa*.

With the sound *e*: for OE. *æg*, in *brain*, *day*, *fain*, *flay*, *hail*, *lay*, *maid*, *may*, *main*, *nail*, *slay*, *slain*, *snail*, *tail*, *wain*; for OE. *eg*, in *ail*, *again*, *blain*, *braid*, *lain*, *lay*, *play*, *rain*, *sail*, *say*, *twain*, *way*; for OE. *ēg*, in *hay*; for OE. *ǣg*, in *clay*, *gray*. If we regard *flay*, *slay*, as from OE. flēan, slēan, rather than from the participles, which is more regular phonetically, we shall have two cases of *ay* for OE. *ēa*.

With the sound *e*[a]: for OE. *ǣg*, in *fair*, *said*, *stair*; for OE. *eg*, in *lair* and one pronunciation of *again*; for OE. *ǣ*, in *hair*, which is the only case where *ai* does not indicate that an OE. *g* has been absorbed into the vowel.

E. — The letters *ei* and *ey* are medial and final forms of the same sign, and occur with the sounds, *i*, *e*, *e*[a], *ai*, corresponding to OE. *e*, *éa*, *æ*, *y*, *ǣg*, *ēa*.

1. *Ei* has the sound *i* only in *either*, æghwæder, *weir*, wer, *weird*, wyrd, and *key*, cæge.

2. *Ei* is pronounced *e* in weigh, *wegen*, eight, *éahta*, neigh, *hnāgan*, whey, *hwāg*, neighbor, *nēahgebūr*. The regular spelling for this is *ai*, *ay*; see V. D.

3. *Ei* is pronounced *e*[a] in *heifer*, hēafore.

4. *Ei* is pronounced *ai* in *height*, hēahðu, and *either* (see 1).

F. — The digraph *ea* has in NE. the sounds *i*, *e*, *e*[a], *a*, *ǫ*[e], and corresponds to the OE. sounds *íe*, *ié*, *e*, *éa*, *éo*, *æ*, *y*, *ī*, *īe*, *ē*, *ēo*, *ēa*, *eā*, *ǣ*.

1. With the sound *i* it occurs for OE. *æ* in *least*; for OE. *i* or *ié*, in *yeast*; for *ī*, in *sneak* (?); for *īe*, in *reap*, *hear*, *dream*; for *éa*, in *beard* and *year*; for *éo*, in *beneath*, *seal*, *beaver*; for *e*, regularly, except *field*, *fever*, *even*, *mere*, *wield* (see III. B, 2); for *ē*, in *weary*; for *ēa*, regularly, except *cheek*, *leek*, *reek*, *steep* (see Anglia, VII. 207); for *ēo*, in *beat*, *cleave*, *dear*, *dreary*; for *y*, in *beadle*, bydel.

2. With the sound *e* the digraph *ea* is used, as stated in IV. B, in *break*, *great*, *yea*, OE. brecan, grēat, geā.

3. With the sound *e*[a], NE. *ea* occurs exceptionally, yet not infrequently, as stated in IV. C. There are 29 cases. For OE. *e*, *bear*, *bear*, *feather*, *leather*, *heavy*, *tear*, *tread*, *weather*, *wreak*, *swear*, *wear*. For *éo*, *heaven*, *read*. For *ǣ*, *breadth*, *breath*, *dread*, *cleanse*, *health*, *sweat*, *thread*, *weapon*. For *ēa*, *bread*, *dead*, *death*, *deaf*, *head*, *lead*, *threat*. For *ēo*, *breast*.

4. With the sound *a* in *hearth*, héorð, *heart*, héorte, *hearken*, hīercnian.

5. With the sound *ǫ*[e], *earn*, éarnian, *earl*, éorl, *earnest*, éornest, *earth*, éorðe, *hearth*, héorð (also pronounced *a*, see 4), *learn*, léornian, *yearn*, géornian, *heard*, hīerde, *dearth*, dīerð.

G. — The gemination *ee* is always pronounced *i* except in one pronunciation of *been* (*ị*), bēon, and *breeches* (*ị*), brēc. Other spellings of this sound already noted are *e* and *ea*; *ie* and *eo* also occur. The OE. sounds which produce *ee* in NE. are *i*, in *week*, *weevil*; *ī*, in *sheer*? ON. *skǣr*; *ē*, *īe*, in *becch*, *beetle*, *bleed*, *breech*, *breed*, *creed*, *deem*, *feed*, *feel*, *feet*, *heed*, *heel*, *fleece*, *gleed*, *green*, *greet*, *keen*, *keep*, *meed*, *meet*, *need*, *queen*, *seek*, *seem*, *sheen*, *sheet*, *sleeve*, *speech*, *steed*, *steel*, *steer*, *steeple*, *sweet*, *teem*, *-teen*, *thee*, *teeth*, *ween*, *weep* (for details, see Anglia, VII. 205); *ēa*, in *cheek*, *leek*, *reek*, *steep*; *ǣ*, in *cheese*, *deed*, *eel*, *greedy*, *leech*,

needle, seed, sleep, speech, street, sweep, weeds (see Anglia, VII. 210); *eā*, in *sheep; ēo*, in *bee, been* (also *ę*), *beer, between, creep, deer, deep, fee, flee, fleece, fleet, free, freeze, glee, keel, knee, lee, leer, need, reed, see, seethe, tree, three, weed, wheel* (see also Anglia, VII. 208).

Ee for *i, ī*, is exceptional; for the other long vowels it is most frequently used for *ē* and *ēo*, 63 cases, against 22 of other vowels. For *eā, ēa, ǣ*, it is used 17 times, against 55 cases of other vowels.

H. — The digraph *ew* occurs in NE. at the end of words with the sound *u*, sometimes preceded by a palatal semivowel; e. g. *new* is pronounced *nju*. It occurs for the OE. diphthongs *ēaw, ēow, ǣw*, and for *efe* in a contraction. The cases are as follows: for *ǣw*, in *lewd, mew;* for *ēaw*, in *dew, few, flew, hew, shrew, stew, strew, threw*; for *ēow*, in *chew, clew, crew, blew, brew, ewe, grew, knew, new, spew, steward, yew*; for *efe*, in *newt*, OE. efete; see Anglia, VII. 207, 208, 210.

In one case only has *ew* a different pronunciation, *sew*, OE. sēowjan.

I. — The digraphs *ie* and *ye* are identical in their use, *ye* being used only as final, and there but rarely. *Ie* has four sounds in NE., *i, ę, ai, e*. It takes the place of OE. *i, íe, e, yg, īe, ēo, ū, īeg*. *Ye* is always pronounced *ai*, and stands for *ēo, yg, ēag, īg*, and *ȳ*.

1. *Ie* has the sound *i* in the following words: for OE. *i, ié, shield, yield;* for OE. *ī, mie;* for OE. *e, field, wield;* for OE. *īe, believe, biestings;* for OE. *ǣ, bier;* for *ēo, fiend, lief, priest, thief*.

2. *Ie* has the sound *ę* in *sieve*, OE. sife.

3. *Ie* has the sound *e*[a] in *friend*, OE. frēond.

4. *Ie* and *ye* have the sound *ai* in the following words: for OE. *ig, hie, lie;* for OE. *yg, lie, rye;* for OE. *īeg, tie*, n., *tie*, verb; for OE. *ēag, dye;* for OE. *ēog, lie*, and also in *good bye*, OE. God bēo mid ēow; Shakespeare, *God buy you*. For OE. *īg* in *stye;* and for OE. *ȳ* in the obsolete *kye*, OE. cȳ.

X.—*The Relation of the Πρόεδροι to the Πρυτάνεις in the Athenian Senate.*

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HALF a century ago no question in Greek antiquities was more disputed and more beset with difficulties than that relating to the presiding officers of the Athenian Senate and Assembly. Any one who now will have the patience to read Schömann's elaborate and learned argument in the sixth chapter of his *De Comitiis Atheniensium*, in which the duties of the Prytanes and Proedri are thoroughly discussed but the whole subject is left in hopeless confusion, and will then read the simple and perfectly clear statement of the matter contained in three sentences of Schömann's *Griechische Alterthümer* (I., p. 400, 3d ed.), will see at least that our knowledge of the antiquities of Athens has not been stationary since 1819. The whole question depends on establishing the relation between the Prytanes and the Proedri. It has always been understood that each of the ten Attic tribes was represented in the Senate of Five Hundred by fifty of its members, and that each of these bodies of fifty exercised important functions in the name of the Senate during a tenth of the Attic year, which period was called a *πρυτανεία*, the fifty senators during this time being called *πρυτάνεις* and their tribe the *πρυτανεύουσα φυλή*.[1] As the Attic lunar year had regularly 354 days (12 lunar months), occasionally 355 days, and in leap-years (which were introduced three times in each cycle of eight years, to bring the lunar years into harmony

[1] See Harpocration, s. v. **πρυτάνεις**: *τὸ δέκατον μέρος τῆς βουλῆς τῶν πεντακοσίων, πεντήκοντα ἄνδρες ἀπὸ μιᾶς φυλῆς, οἱ διοικοῦντες ἅπαντα τὰ ὑπὸ τῆς βουλῆς πραττόμενα, πρυτάνεις ἐκαλοῦντο. ἐπρυτάνευον δὲ ἐκ διαδοχῆς ἀλλήλαις αἱ δέκα φυλαὶ κλήρῳ λαχοῦσαι.* See also s. v. **πρυτανείας**: *ἔστι δὲ ἀριθμὸς ἡμερῶν ἡ πρυτανεία ἤτοι τριάκοντα ἢ ἑξ ἢ τριάκοντα πέντε, καὶ ἑκάστη φυλὴ πρυτανεύει. διείλεκται δὲ περὶ τούτων Ἀριστοτέλης ἐν τῇ Ἀθηναίων πολιτείᾳ.*

with the sun) 384 days, the length of a prytany was 35 or 36 days in ordinary years, and 38 or 39 days in leap-years. It is further clear from Thuc. VI. 14, where Nicias addresses the presiding officer of the Assembly in the words, *καὶ σύ, ὦ πρύτανι, ταῦτα . . . ἐπιψήφιζε*, that in 415 B.C. one of the Prytanes was the *ἐπιστάτης* of the Assembly. But on other occasions we find officers called *πρόεδροι* presiding in both Senate and Assembly,[1] and one of these, who is called *ἐπιστάτης τῶν προέδρων*,[2] is said *ἐπιψηφίζειν*, like the *πρύτανις* in Thucydides. As such passages seemed to establish the identity of the presiding *πρόεδρος* and the presiding *πρύτανις* beyond question, little heed was given to the plain statement of Pollux, who had access to Aristotle's work on the Athenian Constitution, and of other good authorities, that the *ἐπιστάτης* was one of the Prytanes, and that, whenever the Prytanes convened either the Senate or the Assembly, this *ἐπιστάτης* chose by lot nine *πρόεδροι*, one from (the senators of) each of the ten tribes except his own.[3] Such statements were generally referred to another set of *πρόεδροι*, otherwise unknown, who had nothing to do with the presidency of the Senate or the Assembly; and the authority of obscure scholiasts, the impersonal Ulpian, and writers of *ὑποθέσεις*, was cited to support the view, that the fifty Prytanes were subdivided into five sections of ten, each of which sections presided in both Senate and Assembly during one fifth of each prytany (generally seven days), during which they were called *πρόεδροι*, and each set of ten *πρόεδροι* chose a president, also called *ἐπιστάτης*, from their own number, to be their spokes-

[1] Aeschin. *F. Leg.* 65: *τοὺς προέδρους ἐπιψηφίζειν τὰς γνώμας.* Cf. 68: *εἰ δῷ ἐπιψηφίσαι τοῖς προέδροις.* *Ctes.* 75: *τίς ὁ ταῦτα ἐπιψηφίσας πρόεδρος;*

[2] Aeschin. *Ctes.* 39: *τὸν δ' ἐπιστάτην τῶν προέδρων διαχειροτονίαν διδόναι τῷ δήμῳ.*

[3] Poll. *Onom.* viii. 96: *ἐπιστάτης δ' ἐστὶν εἷς τῶν πρυτάνεων, ὁ κλήρῳ λαχών· . . . ἔχει τῶν ἱερῶν τὰς κλεῖς ἐν οἷς τὰ χρήματα καὶ τὰ γράμματα. καὶ ὅταν οἱ πρυτάνεις τὸν δῆμον ἢ τὴν βουλὴν συνάγωσιν, οὗτος ἐξ ἑκάστης φυλῆς πρόεδρον ἕνα κληροῖ, μόνην τὴν πρυτανεύουσαν ἀφιείς.* Harpocr. s. v. **πρόεδροι**: *ἐκληροῦντο [ὑπὸ] τῶν πρυτάνεων (?) καθ' ἑκάστην πρυτάνειαν, εἷς ἐξ ἑκάστης φυλῆς πλὴν τῆς πρυτανευούσης, οἵτινες τὰ περὶ τὰς ἐκκλησίας διῴκουν. . . . ὅτι δὲ ὁ καλούμενος ἐπιστάτης κληροῖ αὐτούς, εἴρηκεν Ἀριστοτέλης ἐν Ἀθηναίων Πολιτείᾳ.* So Suidas, s. v. *πρόεδροι.* The first sentence of the quotation from Harpocration is corrupt.

man and to put questions to vote.[1] This is the view set forth by Schömann in his *De Comitiis Atheniensium*, in which work the ten *πρόεδροι*, who are said to be a part of the *πρυτάνεις*, are called *Proëdri contribules*, while the nine mentioned by Pollux are called *Proëdri noncontribules*, and are supposed to be a distinct class.[2]

The dissertation of K. F. Hermann, *Epicrisis Quaestionis de Proëdris apud Athenienses* (in the Göttingen Index Scholarum, winter of 1843–44), first brought order out of the chaos in which the subject remained after Schömann's investigation. Following the lead of Sigonius, who, three centuries before, had expressed the opinion that all the allusions to Proëdri in the assemblies referred to the nine who were not of the same tribe, Hermann noticed the important fact, that no mention of Proëdri occurs until after the period in which we find one of the Prytanes presiding in the Assembly. This simple observation removed at once all the inconsistencies and perplexities which had beset the subject.[3] Thus the whole matter is made perfectly clear, and all allusions in the classic writers to either presiding Prytanes or presiding Proëdri are reconciled by the view, that the Proëdri were an institution of the fourth century B. C.; that in earlier times the *ἐπιστάτης*,

[1] The following examples will show the nature of this evidence. Schol. in Dem. 594. 5: *ἐπιστάτης δὲ λέγεται εἷς τῶν δέκα προέδρων. ἀφ' ἑκάστης δὲ φυλῆς τῶν δέκα προεβάλλοντο πεντήκοντα ἄνδρες καὶ ἐγίνοντο ὁμοῦ οἱ πάντες πεντακόσιοι. εἶτα ἐκ τούτων τῶν πεντακοσίων ἐπληροῦτο ἡ βουλὴ τῶν πεντακοσίων. οἱ αὐτοὶ δὲ καὶ πρυτάνεις ἐγίνοντο. . . . ἀπὸ δὲ τῶν πεντήκοντα πάλιν ὁ μείζων προεβάλλετο καὶ ἐκαλεῖτο πρόεδρος, ὡς εἶναι ἐκ τῶν δέκα φυλῶν δέκα προέδρους· τούτων δὲ τῶν προέδρων εἷς ἕκαστος αὐτῶν κατὰ διαδοχὴν καθ' ἑκάστην ἡμέραν ἐγίνετο ἐπιστάτης.* The second *ὑπόθεσις* to Dem. *in Androt.*, after explaining the division of the five hundred senators into ten bodies of fifty each, thus proceeds: *ἀλλ' ἐπειδὴ πάλιν οἱ πεντήκοντα πολλοὶ ἦσαν εἰς τὸ ἄρχειν ἅμα, οἱ δέκα κατὰ κλῆρον μιᾶς ἡμερᾶς τῶν ἑπτά, ὁμοίως δὲ ἕκαστος τῶν ἄλλων ἀπὸ κλήρου ἦρχε τὴν ἑαυτοῦ ἡμέραν, ἄχρις οὗ πληρωθῶσιν αἱ ἑπτὰ ἡμέραι. . . . ἰστέον ὅτι οἱ μὲν πεντήκοντα ἐκαλοῦντο πρυτάνεις, οἱ δὲ δέκα πρόεδροι, ὁ δὲ εἷς ἐπιστάτης.*

[2] See Schömann, *De Comitiis*, Book I. Chapter 7.

[3] It will be seen that this view dispenses entirely with the *Proëdri contribules*, who were always an absolute fiction. Hermann (*De Proëdris*, p. 11) thus expresses himself: "Quum ea commodissima solutio futura sit, ubi Sigonium secuti totam illam Proëdrorum contribulium nationem exstirpare atque eliminare potuerimus"! This race has now ceased to exist, at least in Germany.

who was chosen each day by the Prytanes by lot from their own number, presided in both Senate and Assembly; while in the time of the orators this ἐπιστάτης chose by lot each day (festivals excepted) nine πρόεδροι, one from the senators of each of the tribes except his own, who presided in both bodies, choosing one of their own number to act as their spokesman and to be the real president of the day, the latter being called ἐπιστάτης τῶν προέδρων.[1] The object of the change was obviously to give all of the ten tribes some part in managing the Senate and the Assembly; after it was made, the ἐπιστάτης of the Prytanes, besides his duty of choosing the nine πρόεδροι by lot, remained the responsible keeper of the treasure in the Acropolis and of the records in the public archives.[2] This view has been universally accepted in Germany, and by no one more cordially than by Schömann. Our own scholars have generally followed the German authorities. In England, however, where the publication of a translation of Schömann's *De Comitiis* in 1838 has given that work an undue prominence, many distinguished scholars have adhered to the views therein advocated long after sounder views have been accepted elsewhere. The older view is found in Grote's History of Greece,[3] in Smith's Dictionary of Antiquities, and even in the text of the latest edition of Liddell and Scott's Greek Lexicon (under πρόεδρος), though it is corrected in the *Addenda.* This tenacity on the part of English scholars in clinging to an old view may be partly conservatism; but it

[1] This view is perfectly consistent with the statements of Pollux, Harpocration, and Suidas (so far as the last two can be understood) quoted in note 3, page 166, except that these grammarians do not recognize the fact that there was an earlier system which was superseded by that which they describe. Suidas (s. v. ἐπιστάτης) adds something to the statement of Pollux. He says: ἐπειδὰν δὲ οἱ πρυτάνεις συναγάγωσι τὴν βουλὴν ἢ τὸν δῆμον, ὁ ἐπιστάτης κληροῖ προέδρους ἐννέα, ἀπὸ φυλῆς ἑκάστης ἕνα, πλὴν τῆς πρυτανεύουσης. καὶ πάλιν ἐκ τῶν ἐννέα τούτων ἐπιστάτην ἕνα κληροῖ, καὶ τὸ πρᾶγμα παραδίδωσιν. It would appear from this that the original ἐπιστάτης of the Prytanes himself chose the ἐπιστάτης of the Proëdri by lot. In another article s. v. ἐπιστάτης Suidas says: δύο ἦσαν Ἀθήνησιν· ὧν ὁ μὲν ἐκ πρυτάνεων ἐκληροῦτο, ὁ δὲ ἐκ τῶν προέδρων. See Aeschin. *Ctes.* 39 (quoted in note 2, page 166).

[2] See Poll. viii. 96 (quoted in note 3, page 166); the same is repeated by Suidas, s. v. ἐπιστάτης.

[3] See Grote, Vol. IV. Chap. 31 (p. 185).

seems to be based also on the idea that the two views are both more or less theoretical, and that there is no decisive evidence of fact in favor of either.

It may, therefore, not be a useless work to point out a practical method for settling the truth of one or the other view by actual demonstration. If Schömann's older view is correct, the presiding officer in the Senate and the Assembly must always belong to the tribe which holds the prytany at the time; while, on the other supposition, he must belong to this tribe before the institution of the *πρόεδροι*, but afterwards he must always belong to one of the other nine tribes. On this question the Attic inscriptions give us decisive evidence. The *Corpus Inscriptionum Atticarum* now supplies us with an abundance of these which were unknown to the older scholars who discussed this question. The first mention of the title *πρόεδροι* in a document of which the date is known appears in a decree of the archonship of Nausinicus, 378–7 B. C. (C. I. A., Vol. II., Addenda, No. 17[b]). We read here, *Ἐπὶ Ναυσινίκου ἄρχοντος· ἔδοξεν τῇ βούλῃ καὶ τῷ δήμῳ· Λεωντὶ[ς ἐπρυτ]άνευεν, Ἀριστοτέλης ἐγραμμάτευ[εν, τῶν π]ροέδρων ἐπεψήφιζεν Παντάρετο[ς . . . . .]ιεύς.* This shows that *πρόεδροι* presided in the Assembly as early as 378–7 B. C., but the deme of the president cannot be made out. The letters *-ιευς*, however, can refer to no deme of the tribe Leontis except Sunium, and *Σουνιεύς* will hardly fill the vacant space. But we have another decree of the archonship of Nausinicus, in C. I. A., Vol. II. No. 17, in which there is no doubt of the deme of the president. This begins, *Ἐπὶ Ναυσινίκου ἄρχοντος, Καλλίβιος Κηφισοφῶντος Παιανιεὺς ἐγραμμάτευεν. Ἐπὶ τῆς Ἱπποθωντίδο[ς ἑβδό]μης πρυτανείας· ἔδοξεν τῇ βούλ[ῃ καὶ τῶ]ι δήμῳ· Χαρῖνος Ἀθμον[εὺς ἐπ]εστάτει.* The deme *Ἄθμονον* belonged to the tribe Cecropis (Ross, Demen von Attika, p. 110), so that the president Charinus did not belong to the tribe Hippothontis, which held the prytany. Of course *ἐπεστάτει* can refer equally well to the *ἐπιστάτης τῶν προέδρων* as to the original *ἐπιστάτης* of the Prytanes, and the expression *τῶν προέδρων ἐπεψήφιζεν* in the decree first quoted makes it certain that the person who is the subject of *ἐπεστάτει* in the

second, and who does not belong to the φυλὴ πρυτανεύουσα, must be a πρόεδρος. In Vol. II. No. 50, in a decree passed in 368–7 B. C., in the prytany of the tribe Aeantis, the president is called Παράμυθος Ὀτρυν[εύς]. The deme Ὀτρυνεῖς belonged to the tribe Aegeïs (Ross, Demen, p. 130). In No. 116, a decree of the archonship of Nicomachus, 341–40 B. C., passed in the prytany of the tribe Pandionis, we find: τῶν προέδρων ἐπεψήφιζ[ε]ν Ἀριστόμαχος ἐξ Οἴου. There were two demes named Οἶον, one in the tribe Hippothontis, the other in the tribe Leontis (Ross, Demen, p. 130). In the *Corpus Inscriptionum Atticarum* (Vol. II. and Addenda) are 24 Athenian decrees from the period between 378 B. C. and 320 B. C. in which the name of the tribe holding the prytany and that of the deme of the presiding officer of the Assembly can be read; and in no case does the deme of the president belong to the φυλὴ πρυτανεύουσα. It is therefore perfectly certain that in all these decrees, whether the name πρόεδρος is actually given to the presiding officer or not, we find the system of πρόεδροι described by Pollux, Harpocration, and Suidas in actual operation, the president being always the ἐπιστάτης τῶν προέδρων, and never one of the fifty Prytanes.

We have no earlier mention of the name πρόεδροι than that which is found in the decree first quoted from the year of Nausinicus, 378–7 B. C. Of the earlier time from the archonship of Euclides (403–2 B. C) to this date we have only negative evidence, as there is no decree of this period in which the name of the president's deme can be read. But the importance of the era of Nausinicus in the financial history of Athens, — the year which saw the last vestige of the Solonic census swept away and a new system of taxation inaugurated, — gives us strong ground for believing that the first mention of πρόεδροι in this year is not an accident, but that the change in the presidency of the Senate and Assembly was a part of the radical reform for which this archonship is noted.[1]

[1] Meier, *De Epistatis Atheniensium* (in Halle *Ind. Schol.*, 1855), is cited by Schömann (*Gr. Alt.*, I., p. 400) and Hermann (*Staatsalt.*, § 127. 10) as placing the establishment of πρόεδροι between Olymp. 100. 3 and 102. 4, i. e. between 378 and

To make the demonstration complete, we ought to find proof in the decrees of the fifth century B. C. that the president of the Assembly then always belonged to the tribe which held the prytany. It has already been stated that no decrees of the period from Euclides to Nausinicus (402–379 B. C.) are found which give the requisite data; but from the year of Euclides himself, 403–2 B. C., we have an important inscription (C. I. A., Addenda, No. 1[b]) containing two decrees which give the evidence that is needed. The former was passed in the prytany of the tribe Pandionis, and we read, [*Κα*]λλίας *Ὅαθεν ἐπεστάτει.* The deme *Ὅα* or *Ὅα* belonged to the Pandionis (Ross, Demen, p. 140). In the other decree we read, [*Ἔδοξεν τῇ βούλη*]*ι καὶ τῷ δήμῳ· Ἐρεχθηὶς ἐπρυτάνευεν, Κηφισοφῶν Πα*[*ιανι*]*εὺ*[*ς ἐγραμμάτευεν, Εὐκλ*]*είδης ἦρχε, Πύθων ἐκ Κήδων ἐπεστάτει, κ. τ. λ.* Here again the president's deme *Κηδαί* belongs to the *φυλὴ πρυτανεύουσα*, the Erechtheïs (Ross, Demen, p. 122). It is therefore certain that we have here the older system, by which the president is one of the Prytanes, like the *ἐπιστάτης* whom Nicias addresses as *ὦ πρύτανι* in Thucydides.[1] Besides this significant evidence, we have only negative testimony from the fifth century B. C. and preceding times. I can find no decree in the first volume of the C. I. A. (containing the documents earlier than Euclides) in which the name of the president's deme can be read. The regular formula with which decrees began in the fifth

369 B. C. I have not been able to refer to this programme of Meier; but the first inscription quoted above from the archonship of Nausinicus shows decisively that a *πρόεδρος* presided in the assembly in 378–7 B. C.

[1] This inscription was first published by Koumanoudes in the *Ἀθήναιον* (V., p. 92), with the name of the archon *Φρασικλείδης* inserted where the letters *-ειδης* occur in the second decree. This would assign the inscription to the year 371–70 B. C., and the fact that in both decrees the *ἐπιστάτης* is one of the *φυλὴ πρυτανεύουσα*, seven years after we find *πρόεδροι* who belong to other tribes presiding in the Assembly, seemed inexplicable. But Köhler gives the strongest historic reasons for assigning the document to the end of the Peloponnesian war; and, further, the empty space before *-κλειδης* is too small for the letters *Φρασι-*. He therefore assigns it without hesitation to the year of *Εὐκλείδης*. If Köhler's argument for this date needed strengthening, it would be amply confirmed by the evidence showing that both decrees were passed under the older system by which the president of the Assembly was one of the Prytanes.

century B.C. is seen in the C. I. A., Vol. I. No. 32, a decree of 435 B.C.: [Ἔδ]οξεν τῇ βούλῃ καὶ τῷ δήμῳ· Κεκροπὶς ἐπρυτάνευε, Μνησίθεος ἐ[γ]ραμμάτευε, Εὐπείθης ἐπεστάτει. Καλλίας εἶπε. The simple name of the ἐπιστάτης is given without further designation, so far as our evidence goes, except in the two decrees of the year of Euclides. The omission of the name of the deme in the earlier decrees and its insertion in later times may perhaps be explained by the consideration, that under the old system the president belonged to the φυλὴ πρυτανεύουσα, which was always named, so that his tribe was thus designated; while afterwards, when he might belong to any of the other nine tribes, he was hardly designated at all unless the name of his tribe or deme was given.

It can no longer admit of the slightest doubt, that Socrates was the ἐπιστάτης of the Prytanes, and the responsible president of the Assembly, on the memorable day when the question of passing judgment by a single vote on the eight generals after the battle of Arginusae came before the people of Athens. Socrates was chosen to the Senate that year as one of the fifty representatives of his tribe, the Antiochis, and while this tribe held the prytany he was chosen ἐπιστάτης for the day in question.[1] In this responsible position he ab-

[1] Grote's doubt (Vol. VIII. Chap. 64, p. 270) whether Socrates was really the ἐπιστάτης or only one of the Prytanes on this occasion will be settled by a comparison of the authorities. Xen. *Hellen.* I. vii. 14–16: τῶν δὲ πρυτάνεών τινων οὐ φασκόντων προθήσειν τὴν διαψήφισιν παρὰ τὸν νόμον, αὖθις Καλλίξενος ἀναβὰς κατηγόρει αὐτῶν τὰ αὐτά· οἱ δὲ ἐβόων καλεῖν τοὺς οὐ φάσκοντας. οἱ δὲ πρυτάνεις φοβηθέντες ὡμολόγουν πάντες προθήσειν πλὴν Σωκράτους τοῦ Σωφρονίσκου· οὗτος δ' οὐκ ἔφη ἀλλ ἢ κατὰ νόμον πάντα ποιήσειν. μετὰ δὲ ταῦτα ἀναβὰς Εὐρυπτόλεμος ἔλεξεν ὑπὲρ τῶν στρατηγῶν τάδε. Id. *Mem.* I. i. 18: βουλεύσας γάρ ποτε, . . . **ἐπιστάτης ἐν τῷ δήμῳ γενόμενος**, ἐπιθυμήσαντος τοῦ δήμου παρὰ τοὺς νόμους ἐννέα στρατηγοὺς μιᾷ ψήφῳ τοὺς ἀμφὶ Θράσυλλον καὶ Ἐρασινίδην ἀποκτεῖναι πάντας, οὐκ ἠθέλησεν ἐπιψηφίσαι, ὀργιζομένου μὲν αὐτῷ τοῦ δήμου, πολλῶν δὲ καὶ δυνατῶν ἀπειλούντων. Ibid. IV. iv. 2: καὶ ὅτε ἐν ταῖς ἐκκλησίαις ἐπιστάτης γενόμενος οὐκ ἐπέτρεψε τῷ δήμῳ παρὰ τοὺς νόμους ψηφίσασθαι, ἀλλὰ σὺν τοῖς νόμοις ἠναντιώθη τοιαύτῃ ὁρμῇ τοῦ δήμου ἣν οὐκ ἂν οἶμαι ἄλλον οὐδένα ἀνθρώπων ὑπομεῖναι. Plat. *Apol.* 32 B: ἄλλην μὲν ἀρχὴν οὐδεμίαν πώποτε ἦρξα ἐν τῇ πόλει, ἐβούλευσα δέ· καὶ ἔτυχεν ἡμῶν ἡ φυλὴ Ἀντιοχὶς πρυτανεύουσα, ὅτε ὑμεῖς τοὺς δέκα στρατηγοὺς τοὺς οὐκ ἀνελομένους τοὺς ἐκ τῆς ναυμαχίας ἐβούλεσθε ἀθρόους κρίνειν, παρανόμως, ὡς ἐν τῷ ὑστέρῳ χρόνῳ πᾶσιν ὑμῖν ἔδοξε. τότ' ἐγὼ μόνος τῶν πρυτάνεων ἠναντιώθην ὑμῖν μηδὲν ποιεῖν παρὰ τοὺς νόμους, καὶ ἑτοίμων ὄντων ἐνδεικνύναι με καὶ ἀπάγειν τῶν ῥητόρων, καὶ ὑμῶν κελευόντων καὶ βοών-

solutely refused to put the illegal proposition to vote, and stoutly maintained this ground against such clamor and threats as would have overpowered almost any other man, as they appear actually to have overcome the opposition of the other Prytanes who objected. I cannot infer from these accounts that Socrates was compelled to yield and to put the illegal motion by the outcry that was raised; still less, that this motion (as Grote states[1]) "was ultimately put by the remaining Prytanes without his concurrence." If we suppose the original *ἐπιστάτης* to have been the mere spokesman of the fifty Prytanes (as we may perhaps suppose the later *ἐπιστάτης* to have been that of the nine *πρόεδροι*), so that they could overrule his decisions and compel him to follow their direction, it would not have been necessary for the opponents of Socrates to resort to threats of criminal prosecution against him and the minority of Prytanes who sustained him; a far simpler course would have been to persuade his colleagues to vote him down or supersede him in the presidency. The whole tenor of the accounts seems to me to show that Socrates as *ἐπιστάτης* had absolute power to prevent the question from being put, and, further, that he exercised that power stoutly, and with at least temporary success, against the clamor of the people and the advice and persuasion of his colleagues. The question how the illegal proposition was finally carried in the Assembly, so that the purpose of Socrates was frustrated and the generals were condemned by a single vote of the people, unfortunately cannot be answered satisfactorily, from the want of an accurate historian. We see here too plainly

των, μετὰ τοῦ νόμου καὶ τοῦ δικαίου ᾤμην μᾶλλόν με δεῖν διακινδυνεύειν ἢ μεθ' ὑμῶν γενέσθαι μὴ δίκαια βουλευομένων, φοβηθέντα δεσμὸν ἢ θάνατον. Id. *Gorg.* 473 E: *καὶ πέρυσι βουλεύειν λαχὼν, ἐπειδὴ ἡ φυλὴ ἐπρυτάνευε καὶ ἔδει με ἐπιψηφίζειν, γέλωτα παρεῖχον καὶ οὐκ ἠπιστάμην ἐπιψηφίζειν.*

[1] Grote, VIII. p. 271. See p. 272: "The constitutional impediment being thus overthrown, the question was regularly put by the Prytanes to the Assembly." Grote seems to think that the act of *ἐπιψηφίζειν*, to which Socrates objected, consisted in opening the debate on the proposition, whereas it obviously was putting the proposition to vote. The debate upon the illegal proposition of the Senate had been going on, as Xenophon describes it, long before Socrates intervened with his refusal to take the vote. See *Hellen.* I. vii. 9–13.

that we have lost Thucydides and must make the best of Xenophon.

Two answers are possible. First, we may take the view that the refusal of Socrates to put the illegal motion caused this to be withdrawn, so that no further attempt to carry the original proposition of the Senate was made, and that the way was therefore clear for other propositions. Euryptolemus now made a speech advocating an entirely legal course of procedure, and ended by moving formally that the generals be tried separately according to the decree of Cannonus, which seems to have forbidden the condemnation of more than one person by a single vote. We see, therefore, that the motion now brought before the Assembly was a perfectly legal one, which Socrates could not object to putting to vote. When the vote was taken, this motion was declared carried. Xenophon's obscure account does not make it clear exactly how the vote was reversed;[1] but it is plain that threats of prosecution were renewed in some form, and that a second vote was taken by which the original proposition (to try all together) was substituted for the new motion and carried. If Socrates still remained president, we must suppose that the confusion in the Assembly which followed the vote approving the motion of Euryptolemus enabled some skilful politician to introduce the original proposition as an amendment at the last minute, and to carry it before Socrates understood the manœuvre, or when he was helpless to stop proceedings. This view supposes that the proposition of Euryptolemus was a regular motion, made when there was no other motion before the assembly. This seems to be implied in Xenophon's words *ἔγραψε γνώμην*, although it is inconsistent with his subsequent account of a *διαχειροτονία*, or alternative vote on this motion and the original illegal motion. I cannot believe that Socrates could have consented to put such a double mo-

[1] Xen. *Hellen.* I. vii. 34: *ταῦτ' εἰπὼν Εὐρυπτόλεμος ἔγραψε γνώμην κατὰ τὸ Καννώνου ψήφισμα κρίνεσθαι τοὺς ἄνδρας δίχα ἕκαστον · ἡ δὲ τῆς βουλῆς ἦν μιᾷ ψήφῳ ἅπαντας κρίνειν. τούτων δὲ διαχειροτονουμένων τὸ μὲν πρῶτον ἔκριναν τὴν Εὐρυπτολέμου · ὑπομοσαμένου δὲ Μενεκλέους καὶ πάλιν διαχειροτονίας γενομένης ἔκριναν τὴν τῆς βουλῆς.*

tion, which included the illegal proposition as an alternative, when he had refused to put the latter as a separate motion; nor can I reconcile such action on his part with the language which is attributed to him by Plato and in the Memorabilia. Unless, therefore, the reference to a *διαχειροτονία* in the Hellenica is discredited as inconsistent with the preceding words, we are driven to the only alternative, which is on the whole more free from difficulties, that of supposing the speech of Euryptolemus to be made, and the two votes to be taken, in another meeting of the Assembly on another day. There is nothing to imply that the whole transaction was finished in one session of the Assembly, except the words of Xenophon, *μετὰ δὲ ταῦτα ἀναβάς*, etc. (end of the quotation from the Hellenica in the note on page 172); but this can hardly pass for much in a writer like Xenophon, and we have at least the authority of the spurious Platonic Axiochus[1] for saying that the condemnation of the generals took place on the day after the refusal of Socrates to take the vote. On this supposition, there remains no difficulty about the consent of the *ἐπιστάτης* to any form of vote, as Socrates could not preside twice in the same year.[2]

[1] [Plat.] Axioch. 368 D: *ποῦ δὲ πρώην οἱ δέκα στρατηγοί; ὅτ' ἐγὼ μὲν οὐκ ἐπηρόμην τὴν γνώμην· οὐ γὰρ ἐφαίνετό μοι σεμνὸν μαινομένῳ δήμῳ συνεξάρχειν· οἱ γὰρ περὶ Θηραμένην καὶ* Καλλίξενον *τῇ ὑστεραίᾳ προέδρους ἐγκαθέτους ὑφέντες κατεχειροτόνησαν τῶν ἀνδρῶν ἄκριτον θάνατον.* The allusion to *πρόεδροι* in 406 B. C. is enough to condemn the passage as spurious.

[2] Poll. VIII. 96: *δὶς δ' οὐκ ἔξεστι γενέσθαι τὸν αὐτὸν ἐπιστάτην.* This refers to the *ἐπιστάτης* of the Prytanes.

APPENDIX.

I. PROCEEDINGS OF THE SEVENTEENTH ANNUAL SESSION, NEW HAVEN, 1885.

II. TREASURER'S REPORT (p. xxx).

III. LIST OF OFFICERS AND MEMBERS (p. liii).

IV. CONSTITUTION OF THE ASSOCIATION (p. lxiv).

V. PUBLICATIONS OF THE ASSOCIATION (p. lxvi).

MEMBERS IN ATTENDANCE AT THE SEVENTEENTH ANNUAL SESSION.

Cyrus Adler, Philadelphia, Penn.
Joseph Anderson, Waterbury, Conn.
John Avery, Bowdoin College, Brunswick, Me.
I. T. Beckwith, Trinity College, Hartford, Conn.
George Bendelari, Yale College, New Haven, Conn.
Louis Bevier, Rutgers College, New Brunswick, N. J.
Charles J. Buckingham, Poughkeepsie, N. Y.
Sylvester Burnham, Madison University, Hamilton, N. Y.
Henry F. Burton, University of Rochester, Rochester, N. Y.
John M. Cross, Lawrenceville, N. J.
Francis B. Denio, Bangor Theological Seminary, Bangor, Me.
Martin L. D'Ooge, University of Michigan, Ann Arbor, Mich.
L. H. Elwell, Amherst College, Amherst, Mass.
O. M. Fernald, Williams College, Williamstown, Mass.
Mrs. G. W. Field, Brooklyn, N. Y.
Isaac Flagg, Cornell University, Ithaca, N. Y.
O. O. Fletcher, Ottawa, Ill.
Farley B. Goddard, Harvard College, Cambridge, Mass.
Thomas D. Goodell, Hartford, Conn.
William W. Goodwin, Harvard College, Cambridge, Mass.
William Gardner Hale, Cornell University, Ithaca, N. Y.
Isaac H. Hall, New York, N. Y.
Albert Harkness, Brown University, Providence, R. I.
William R. Harper, Baptist Theological Seminary, Chicago, Ill.
James A. Harrison, Washington and Lee University, Lexington, Va.
Samuel Hart, Trinity College, Hartford, Conn.
W. T. Hewett, Cornell University, Ithaca, N. Y.
Edmund Morris Hyde, Cheshire, Conn.
Charles R. Lanman, Harvard College, Cambridge, Mass.
Thomas B. Lindsay, Boston University, Boston, Mass.
T. R. Lounsbury, Sheffield Scientific School, New Haven, Conn.
David G. Lyon, Harvard College, Cambridge, Mass.
Francis A. March, Lafayette College, Easton, Penn.
Winfred R. Martin, Hartford, Conn.
George B. McKibben, Denison University, Granville, O.
Augustus C. Merriam, Columbia College, New York, N. Y.
Elmer T. Merrill, Wesleyan University, Middletown, Conn.
C. K. Nelson, Brookeville, Md.
W. B. Owen, Lafayette College, Easton, Penn.
Albert H. Palmer, Adelbert College, Cleveland, Ohio.
Tracy Peck, Yale College, New Haven, Conn.
Bernadotte Perrin, Adelbert College, Cleveland, Ohio.

Samuel B. Platner, Adelbert College, Cleveland, O.
Samuel Porter, National Deaf Mute College, Washington, D. C.
L. S. Potwin, Adelbert College, Cleveland, O.
George Prentice, Wesleyan University, Middletown, Conn.
C. W. Reid, Allegheny College, Meadville, Penn.
Rufus B. Richardson, Dartmouth College, Hanover, N. H.
W. S. Scarborough, Wilberforce University, Wilberforce, O.
C. P. G. Scott, Columbia College, New York, N. Y.
Thomas D. Seymour, Yale College, New Haven, Conn.
Edward S. Sheldon, Harvard College, Cambridge, Mass.
E. G. Sihler, New York, N. Y.
Frank B. Tarbell, Yale College, New Haven, Conn.
Ambrose Tighe, Yale College, New Haven, Conn.
James A. Towle, Ripon College, Ripon, Wis.
Addison VanName, Yale College, New Haven, Conn.
William Hayes Ward, New York, N. Y.
Benjamin W. Wells, Providence, R. I.
J. B. Weston, Christian Biblical Institute, Standfordville, N. Y.
A. S. Wheeler, Sheffield Scientific School, New Haven, Conn.
William Dwight Whitney, Yale College, New Haven, Conn.
Henry P. Wright, Yale College, New Haven, Conn.
John Henry Wright, Dartmouth College, Hanover, N. H.

[Total, 64.]

AMERICAN PHILOLOGICAL ASSOCIATION.

NEW HAVEN, CONN., Tuesday, July 7, 1885.

THE Seventeenth Annual Session was called to order at 3.15 P. M., in Sloane Laboratory, Yale College, by the President of the Association, Professor William W. Goodwin, of Harvard College.

The Secretary, Professor John H. Wright, of Dartmouth College, presented the following report of the Executive Committee: —

a. The Committee had elected as members of the Association:[1]

George Gillespie Allen, Boston, Mass.
Sidney G. Ashmore, Professor of Latin, Union College, Schenectady, N. Y.
Francis Brown, Professor of Biblical Philology, Union Theological Seminary, New York, N. Y.
Sylvester Burnham. Professor in Madison University, Hamilton, N. Y.
Adolphe Cohn, Professor of French, Harvard College, Cambridge, Mass.
Henry A. Coit, D. D., St. Paul's School, Concord, N. H.
John M. Cross, Ph. D., Lawrenceville, N. J.
John M. Comstock, Chelsea, Vt.
W. S. Currell, Professor in Hampden-Sidney College, Va.
Miss C. T. Davis, Teacher of Latin, Packer Institute, Brooklyn, N. Y.
Francis B. Denio, Professor in Bangor Theological Seminary, Bangor, Me.
Morton W. Easton, Professor of Comparative Philology, University of Pennsylvania, Philadelphia.
Charles E. Fay, Professor of Modern Languages, Tufts College, College Hill, Mass.
O. O. Fletcher, Ottawa, Ill.
Kuno Francke, Instructor in German, Harvard College, Cambridge, Mass.
Harold N. Fowler, Ph. D., Instructor in Greek, Harvard College, Cambridge, Mass.
Henry C. Johnson, Professor of Latin, Lehigh University, Bethlehem, Penn.
David G. Lyon, Professor of Divinity, Harvard College, Cambridge, Mass.
Miss Ellen F. Mason, Newport, R. I.
George F. McKibben, Professor in Denison University, Granville, O.
Charles R. Miller, Editor of *The New York Times*, New York, N. Y.

[1] In this list are included the names of all persons elected at the Seventeenth Session of the Association.

George E. Moore, Professor in Andover Theological Seminary, Andover, Mass.
Rev. Alfred B. Nichols, Tutor in German, Yale College, New Haven, Conn.
Marston Niles, 155 Broadway, New York, N. Y.
Albert H. Palmer, Professor of German, Adelbert College, Cleveland, O.
George Herbert Palmer, Professor of Philosophy, Harvard College, Cambridge, Mass.
John P. Peters, Professor in the Protestant Episcopal Divinity School, Philadelphia, Penn.
W. H. P. Phyfe, 12 East 43d Street, New York, N. Y.
William T. Piper, Ph. D., Cambridge, Mass.
Samuel B. Platner, Ph. D., Instructor in Adelbert College, Cleveland, O.
John W. Redd, Professor of Greek, Centre College, Danville, Ky.
Charles F. Richardson, Professor of English, Dartmouth College, Hanover, N. H.
Samuel G. Sanders, Professor of Greek, Southwestern University, Georgetown, Tex.
C. C. Shackford, Professor in Cornell University, Ithaca, N. Y.
Robert Sharp, Professor of Greek, University of Louisiana, New Orleans, La.
E. G. Shumway, Professor of Latin, Rutgers College, New Brunswick, N. J.
Josiah R. Smith, Professor of Greek, Ohio State University, Columbus, O.
Louis D. Ray, Wilson and Kellogg's School, New York, N. Y.
F. E. Rockwood, Professor in the University at Lewisburg, Penn.
J. R. S. Sterrett, Ph. D., Athens, Greece.
E. T. Tomlinson, Rutgers Grammar School, New Brunswick, N. J.
William Hayes Ward, D. D., Editor of *The Independent*, New York, N. Y.
Benjamin B. Warfield, Professor of New Testament Greek, Western Theological Seminary, Allegheny, Penn.
William E. Waters, Tutor in Latin, Yale College, New Haven, Conn.
D. M. Welton, Professor of Hebrew, McAllister Hall, Toronto, Canada.
James R. Wheeler, Ph D., Cambridge, Mass.

[Total, 46.]

b. The Proceedings for the Session of July, 1883, were published in November, 1884. The Transactions for the same year (Vol. XIV.) were published in October, 1884. The Proceedings for the Session of July, 1884, were published on January 22, 1885, and the Transactions for the same year (Vol. XV.) were published on the day of making the report (July 7, 1885).

On motion, Professor George Bendelari, of Yale College, was appointed Assistant Secretary for the session.

At 3.45 P. M., the reading of communications was begun. At this time there were about sixty persons in the room; at subsequent meetings the number of those present averaged seventy.

1. Quantity in English Verse, by Thomas D. Goodell, Ph. D., of the Public High School, Hartford, Conn.

It is evident that every syllable occupies in pronunciation a definite amount ıe, — definite in any given case, however that amount of time may vary for

the same syllable in different circumstances. In any series of words naturally pronounced, — e.g. "I come from haunts of coot and hern," — the relative time occupied by the voice in speaking each syllable is capable of measurement. The time thus given to each syllable is its "quantity." The subject of investigation in the paper was the "quantities" (in this sense of the word) actually appearing in modern English poetry as commonly and naturally read aloud.

The rhythm of Greek verse consisted in "a definite arrangement of times," *χρόνων τάξις ἀφωρισμένη*. That is, the voice marked off the flow of syllables into little groups by an increase of stress in the enunciation of at least one syllable of each group. This ictus recurred at approximately equal intervals of time, so that in a given line the separate syllabic groups, or feet, were as nearly equal in time as the measures in modern music. Further, the relative quantities of the syllables constituting each foot were such that, as in modern music the measures, so in Greek verse the feet contained, for example, some three, others four units of time. The two factors of rhythm in Greek verse were thus quantity and stress.

All this is equally true of English verse, and in so far English verse is quantitative. Of course English verse is, in a certain sense, based on word-accent. The only essential element of English word-accent is stress; change of pitch may or may not be present without affecting the accentuation of a word; but whatever syllable has the stress has an accent, and where stress is not, there is no accent in English. And, for the most part, the place of the primary accent of English words is fixed. In constructing a line of verse, therefore, enough of the ictuses of the line must be made to coincide with primary accents to enable the reader to locate the other ictuses without effort. So far English verse is based on word-accent. But stress is only one element of rhythm. The other element, quantity, is just as essential in English verse as it is in music. The rhythmical character of a foot depends on the relative times of the syllables constituting the foot, precisely as in Greek verse, and precisely as in modern music. The late Sidney Lanier, in his volume on "The Science of English Verse" (New York, 1880), was apparently the first to point out the full significance of this fact; but owing to his faulty method of presenting the subject, and also to the intermingling of not a few errors, many readers have been so repelled as quite to overlook his valuable kernel of truth.

In illustration and proof of the above statements, passages of familiar English poetry were read, and their quantities indicated. It was shown that all varieties of Greek feet of four and of three times are common in English; while some combinations are frequent in English which were either rare or unknown in Greek.

Finally, an endeavor was made to state some of the laws governing the quantity of English syllables in connected discourse.

Remarks upon the paper were made by Professors W. D. Whitney, F. A. March, W. W. Goodwin, and in reply by Dr. Goodell.

Professor Whitney said: —

To claim quantity as an element in English measure is tautological, since measure is quantity. It amounts only to claiming that English verse is indeed measure, and not, like French verse, merely enumeration. If the successive ictuses did not follow one another at sensibly equal intervals in our verse, there

would be no measure, and hence, to our sense, no verse. But whereas in Greek (taking that language as an example) each syllable had its own independent quantity, as long or short, and these quantities, fitted together, determined the measure of the verse, the measure of English verse is determined only by accent, and the quantities of syllables are determined by the measure being made longer or shorter (by prolongation and abbreviation of the pronounced elements — especially, of course, the vowels — and by management of pauses) as the measure requires. Hence, measure being postulated as a common fundamental element, the method of its establishment in Greek and English respectively has all the difference ever claimed for it, — all, in fact, that one can well conceive; and Lanier's attempt to explain away this difference is a failure.

Professor March said: —

The common notation of English prosody exhibits the line as made up of equal times (feet), and the foot as made up of an arsis and thesis, the arsis being an accented syllabl, the thesis unaccented syllabls and rests. The way in which the time of each foot is divided between the syllabls and rests is commonly not indicated. But it might be, of course; and it often has been.

Many school grammars stil mark the syllabls as long and short, holding the ictus to lengthn its syllabl if otherwise short, and the thesis to shortn. This makes the English line similar in sound to a Latin or Greek line. But it does not accurately represent the facts. There is a striking difference between an English verse and a Greek one regarded merely as a succession of sounds; the ictus, the arsis of the foot, is the long syllabl in Greek, but in English freely the short one. Imagin an Athenian actor undertaking to recite an iambic line with the ictus on the short syllabls!

A considerabl number of English prosodists, who hav recognized the varying lengths of the syllabls in arsis and thesis, hav undertakn to represent the lengths which ought to be givn to each syllabl in selected passages of English poetry, using the common musical notation.[1] They hav not accomplisht much as yet; they hav indeed hardly attempted more than to giv elocutionists directions for tasteful reading. But it seems to me that there is an interesting field here for further study, as suggested by the paper.

It is possibl that there ar certain accented syllabls so short that they ar never combined with a short unaccented syllabl to make a foot; or certain unaccented syllabls so long that they ar never put with long accented syllabls. This can be ascertaind by an examination of all the feet in Milton, Shakespeare, and the rest, as Sievers has just examind Béowulf.

If no such syllabls ar found, it is stil likely that there may be some as to which a large majority of the feet indicate one quantity or the other, and show that certain combinations ar preferd for the happiest verse.

[1] Joshua Steele, Prosodia Rationalis, London, 1775. Richard Roe, English Metre, London, 1801. J. Odell, Essay on the Elements, Accents, and Prosody of the English Language, for Supplement to Johnson's Dict., London, 1806. John Thelwall, Illustrations of English Rhythmus, London, 1812. He contributed articls on this subject to Rees' New Encyclopaedia. He holds that the English rhythmus is one of mezure; we hav all the feet of the classic languages, and more; all feet ar mezured from the ictus. He uses musical notation of length, common and tripl time; lays foundations for everything in fysiological facts. Sidney Lanier, The Science of English Verse, New York, 1880.

Or if not in all the poets, yet in some singl poet it may appear that they ar pronounct in such and such ways. It is likely that personal preferences for such and such combinations may be establisht from the poetry of Milton and Shakepeare and Tennyson.

The expressivness and harmony of such and such combinations may also be establisht by induction.

The study of these personal elements, and of rules of expression and harmony, is as valuabl perhaps as that of the essential laws of verse.

Notations of readings such as hav been givn in the paper just red, in Lanier, Thelwall, and the rest, ar interesting, and would be more so if recorded by fonograf; if accumulated, they might rise to scientific value.

Rules such as ar givn in the paper for adjusting the prose quantities to the mezure of a verse ar valuabl. The fundamental rule which was generalized in the classic poetry of Greece and Rome is to keep your ictus long, your thesis short, as far as may be. Rules for more delicate adjustment ar as yet in the realm of taste. See "Harmonies of Verse," Proceedings of this Association for 1883, pp. xi, xii.

Our scholar poets ar now often trying their skil in making verses exactly like those of Latin and Greek poetry, as other poets occasionally hav done since Spenser. They may use rules of taste in reading as rules for construction of the poetry of the future.

2. Equestrianism in the Doloneia, by Professor B. Perrin, of Adelbert College, Western Reserve University, Cleveland, Ohio.

In the Homeric poems the horse is driven to the war chariot in a manner purely Oriental. There is no fighting on horseback. Ordinary riding is not even mentioned, either in peace or war. Instances of professional riding or performing on horseback are O 679 ff., and ε 370 ff., both in similes which probably involve features of the poet's own period. The only other place in Homer where riding is mentioned at all, and the only one where a hero is represented as riding, is in the Doloneia, vv. 469 ff. That Diomedes at least, if not Odysseus also, is made to ride the horses of Rhesus back to the Greek camp, has been the almost unanimous view of commentators. But the last edition of Liddell and Scott, *s. v.* ἵππος, adds to previous material this parenthesis: "For a careful reading of the whole passage shows that Diomed and Ulysses were *driving the chariot* of Rhesus, not *riding his horses.*"

In persuading the Greek heroes to attack the Thrakians, Dolon dwells about equally on the horses, chariot, and armor of Rhesos. Of the armor no further mention is made, except that it lay on the chariot (v. 504). To the chariot certain reference is made in vv. 475, 501, and 504 f. In the first passage the horses are described as haltered to the railing of the chariot box. In the second, Odysseus is said to have forgotten to take the goad from the chariot when he untied the horses from it. In the last, Diomedes thinks of stealing the chariot by dragging or carrying it away. Here only does the poet represent Dolon's description of the splendor of the chariot as inflaming the cupidity of the Greeks. Their ambition was centred on the horses as the chief prize.

The only phrase of the poet which can lead one to think of the chariot as taken with the horses is the ἵππων ἐπεβήσετο of vv. 513 and 529. Everywhere else in Homer this phrase is used of mounting to the chariot behind the horses. It

was this consideration which led Welcker (Ep. Cyc., II., p. 217) first to dispute the inference of Wolf and others that the Doloneia afforded the solitary instance of actual riding in Homer. Welcker's view has been adopted by only two scholars (Anhang to the Ameis-Henze Iliad *ad loc.*), — Sickel, in an essay as yet inaccessible to the writer, and Döderlein, in his note on K 513. Aside from these, the scholiasts, Eustathius, and all commentators accessible to the writer interpret the passage as Wolf did (Proleg., p. 80).

Against this view of Welcker, thus unexpectedly restored to notice by Liddell and Scott, may be reproduced the arguments of Düntzer (Philol., XII., p. 54 f.), and one or two fresh arguments may be urged, suggested by a review of the episode.

1. For ἵππων ἐπεβήσετο = *he mounted the horses*, the original meaning of ἵππων, and the fact that this is the only place in Homer where mounting on horseback is described at all, so that the serio-comic return of the Greek heroes to their camp involves the poet in a description of that for which there was no well-established phraseology, justify the somewhat forcible appropriation of a stock phrase current in another sense than the exact one here needed.

2. The dilemma of Diomedes (503 ff.), was as to what rashest thing he could do, not whether he should continue or cease his rashness. The alternative of total opposition, like the second in the mind of Achilles, A 192, is presented to the mind of Diomedes by the signal of Odysseus for return. Athene then dissuades him, not from killing more Thrakians only, as Welcker puts it, but also and just as much from stealing the chariot.

3. The author of the Rhesus agrees with that of the Doloneia in having the horses stolen without the chariot. Cf. Rhesus, 616 ff., 780–798. In both passages ὄχημα πωλικόν refers to the horses alone.

Amid noticeable variations from the Doloneia and the Rhesus in Vergil (Aen. I. 469 ff., cf. Servius *ad loc.*), there is plain agreement in this, that the horses only are stolen. Ovid alone, in the speech of Ulysses for the armor of Achilles, where other familiar Homeric episodes, as well as other features of this, are freely distorted, thinks of the chariot of Rhesos as stolen (Met. XIII. 239 ff.).

Diomedes at least, then, rode one of the horses which Odysseus had hitched together. But both heroes are made to dismount at v. 541, although it is nowhere expressly stated that Odysseus mounted with Diomedes. The point in the narrative where this is to be understood is held by some commentatators to be v. 499, by others v. 513. No very conclusive arguments can be urged for either view. The paper endeavors to show that one moves along the line of least resistance by following Eustathius, and making Odysseus mount at v. 513, after Diomedes.

The Association adjourned to 8 P. M.

NEW HAVEN, CONN., Tuesday, July 7, 1885.

EVENING SESSION.

One of the Vice-Presidents, Professor Tracy Peck, of Yale College, called the Association to order, at 8.15 P. M., in the Lecture-Room of Sloane Laboratory, where a large audience had gathered to listen to the address of the President.

The Secretary read the programme for the meeting of Wednesday.

On behalf of President Noah Porter, of Yale College, necessarily absent from town, Professor Peck invited the members of the Association and their friends to visit the Library, Battell Chapel, the Art Gallery, the Museums, and other collections of Yale College. He also extended an invitation to the Association to join in an excursion upon the Sound, on Wednesday afternoon, in the barge Juno.

3. The Annual Address, by Professor William W. Goodwin, of Harvard College, Cambridge, Mass., President of the Association.

The Address began with a brief review of the early history of the Association, with reminiscences of the first three meetings, of 1869, 1870, and 1871, and a tribute to the memory of Professors Hadley and Packard, which the second meeting in New Haven suggested.

After a short discussion of the scope of the science of Philology, to which the Association is devoted, the speaker passed to the chief subject of his address, — *the American School of Classical Studies at Athens.* From what was said on this topic the following extracts are made: —

"I wish to make an earnest appeal to the members of this Association, individually and collectively, in behalf of the boldest enterprise that has ever been undertaken by our countrymen to maintain the broad definition of classic Philology to which we are pledged. I mean the American School of Classical Studies at Athens. Although this was not founded by our society, it is yet an institution which deserves the earnest support of every friend of sound learning, of every one who is eager to increase the depth and the breadth of American scholarship. The studies which it was established to encourage are those which lie at the very foundation of classic philology, as this science was understood by its greatest masters. It was a wise and far-sighted policy which led Germany more than fifty years ago to establish her Archaeological Institute in Rome; and it was a still wiser policy which led the Imperial government of Germany about ten years ago to give this body two permanent homes in classic lands, — one upon the Capitol of Rome, the other at the foot of the Acropolis of Athens. The German Institute found a French school at Athens, which had been working there since 1846; and the example of these successful institutions soon inspired English scholars to prepare to enter the same field. While our more cautious English brethren were planning and securing the means to establish themselves permanently at Athens, our own more impetuous scholars, with a zeal which has called forth surprise and admiration, saved the time which elaborate financial schemes would have cost us, and established our School at once, without capital, through the co-operation of twelve American colleges. These colleges agreed to supply us with a director each year from their body of professors, without expense, except for house-rent; and the friends of our enterprise at each college agreed to pay an annual contribution (generally $250) for a certain term of years, to meet the other expenses of the School, except when this sum was voted from the college treasury. We have thus a foundation which enables us now to enter upon our fourth year with an honorable record in the past and bright hopes for the future; but we must not conceal from our friends

or from ourselves that this is even now a precarious foundation, and one upon which we cannot safely rely for our future support.

"The object of the School at Athens is to afford American students the same advantages for studying in Greece itself the many lessons which the great mother of arts has still to teach them as are now enjoyed there by the students of Germany and France, and will soon be enjoyed by those of England. These advantages may seem sentimental and unsubstantial to those who have never known them; but no arguments are needed by any one who has once trodden the soil of Greece and breathed the air of Attica to convince him of their reality. The school will be equally beneficial to two classes of students, and a young man coming to Athens fresh from an American college may often doubt into which of these he will ultimately fall.

"It will afford the most ample facilities for those who wish to make a professional study of the monuments of Greek art and architecture which are preserved in such perfection at Athens, to study the vast collection of inscriptions which surround the visitor on every side as he enters the Acropolis, or to make topographical investigations in Athens or its neighborhood, of which there is still need in every direction. Let no one imagine that all the questions — even the *great* questions — which the architecture and the topography of Athens herself have to answer, have already been settled. The English architect Penrose is (or was recently) in Athens, making measurements for a revised edition of his great work on the Principles of Athenian Architecture. The whole question of the ancient roadway to the Acropolis which led to the Propylaea was still open when I left Athens two years ago; many important points in the original plan of the Propylaea itself are still under active discussion; and the western slope of the Acropolis still offers one of the most promising fields in or near Athens for archaeological discoveries. In 1882 Dr. Dörpfeld, the distinguished architect of the German School at Athens, caused much excitement among scholars by calling in question the common estimate of the Attic foot, on the ground of measurements made upon the Parthenon and the temple of Νίκη ἄπτερος. We do not yet know which of several hills is the famous citadel of Decelea, which the Spartans fortified in the last year of the Peloponnesian war; and the place of meeting of the public assembly of Athens, the renowned Pnyx, the deme of the great Attic Demos, is still a mystery to most scholars, — to none more than to those who most strongly reject the ancient remains now commonly known at Athens as the Pnyx and the Bema. The whole inner structure of the Erechtheum is a puzzle upon which no two scholars can agree. The so-called Theseum at Athens proudly keeps its famous name, and claims to be the original monument erected by the Athenians over the colossal skeleton which Cimon brought from Scyros in 468 B.C., on the very day when Sophocles first defeated Aeschylus in tragedy in the Dionysiac Theatre; while its identity is absolutely denied by most modern archaeologists, who at the same time are unable to agree on any satisfactory name for it. The question of the manner of lighting the Greek temples without side windows is still vigorously discussed; for, although some distinguished scholars confidently assert that the structure of the great temple of Zeus at Olympia settles the controversy decisively in favor of the hypaethral theory of an opening in the roof, others are equally convinced that this is an exploded notion. I mention these items merely as evidence that there is plenty of work, even on important and interesting subjects, still left for stu-

dents of Greek architecture and topography. If our School is ever supplied with the means of making independent archaeological explorations and excavations, as we must hope it will be, there is no limit to the new opportunities for original study which may suddenly be opened to the students. The French School sent its expedition to Delos many years ago; the German Institute was an important centre of exciting news while the exploration of Olympia was going on, and its present architect, Dr. Dörpfeld, was one of the chief directors of the excavations. The German Institute last year made important excavations and discoveries in and around the temple of Sunium. The Archaeological Society of Athens has disclosed a wealth of ancient temples in the sanctuary of Aesculapius, near Epidaurus, — among others, the beautiful round building erected by Polycletus, and the theatre, also the work of Polycletus; and the same society has now opened to the day the foundations and pavement of the great sanctuary of Eleusis, the home of the Eleusinian Mysteries, which offers more problems to architects and archaeologists than will soon be answered. Every part of Greece is full of plans for new excavations, which merely need money to be carried out with substantial results. The ruins of Delphi, with their countless buried temples, which peer imploringly from the scanty earth as if beseeching the traveller to restore them to the light of the sun, lie at this moment waiting only for some power to decide who shall excavate them, — the French, who are both willing and able to complete the work at their own expense, and ready to leave all that may be found to the Greeks, — or the Greeks themselves, who are equally willing, but are unable to meet the expenses of so great an undertaking. In the mean time, the people of the wretched village which covers these precious ruins with only a few feet of earth, have unfortunately become fully aware of the value of their sacred soil, and now demand about $100,000 for their houses and land, of which the government hesitates to dispossess them. But this dead-lock must soon be ended; and happy will be the scholars who are fortunate enough to be in Greece when the solemn silence of that wonderful valley of Delphi is first broken by the pickaxe and the spade.

"But although Athens and the rest of Greece offer such great and ever increasing attractions to special students of archaeology, the chief object of the School at Athens must always be to enlarge the scholarship of those who are to teach our youth in our own higher institutions of learning, by enabling them to complete their classical studies under all the inspiring associations of the real Athens. Such students will naturally add a year or more in Athens to a course of philological study in Germany or perhaps at home. Now, without entering upon any professional investigations in either architecture or archaeology, without undertaking excavations or making a special study of inscriptions or disputed points in antiquities, every classical student will find a large amount of work which he *must* do somewhere, and which he can do nowhere else so well as in Greece itself. There can be no better supplement to most of the philological studies of the German universities, and no better antidote for others, than a year or two spent in actual study in the countries and amid the very scenes with which the student's university life has been chiefly concerned. I hope it may be one of the chief functions of the School at Athens to complete and correct the strict training in scientific philology which students will receive from German universities or perhaps from our own, and thus to round off their scholarship and give it a practical turn, which will be its strongest safeguard against pedan-

try. A student will find a large range of classical subjects to which he can profitably devote a year in Greece. Every classical teacher should have a general acquaintance with at least the topography of Athens and Attica, and with the chief monuments of architecture and art in Athens. He should study the position of the three lines of wall by which Athens was connected with her harbors, and examine the massive remains of the fortifications with which Themistocles surrounded the Piraeus and Munychia. The account which Thucydides gives of the solid construction of these walls will be no longer a mere piece of ancient history to one who can make the circuit of the Piraeus; and the line of the southern Long Wall can be traced for perhaps half a mile from the hill of Munychia by scattered stones all pointing towards the Acropolis, while a cut in the railway discloses a section of this wall with several courses in place. The famous temples of the Acropolis and the other ruins of the city will impress themselves upon his mind and his future teaching almost without study: he cannot escape their influence if he will. Again, the whole literature of Greece is full of passages which can be fully appreciated only when they are read or remembered on the spot, in full view of the scenes which they describe. Where else than in Athens can the noble verses of the Attic poets, in which they celebrate their beautiful home, be so thoroughly understood? The historic scenes on which one looks down from Mount Pentelicus are far more vivid to the eye than years of study with books and maps can make them. We have here unfolded before us a map of Attica such as no Kiepert can draw for us: we see the beautiful bay and plain of Marathon lying almost at our feet; we try to follow the blue Euripus in its windings between the steep shores until the hills of Attica and of Euboea become inextricably blended; we look upon the sea from the bay of Eleusis and the coasts of Corinth and of Argolis to the islands beyond Sunium; and we see the great plain of Attica between Parnes and Hymettus, stretching to the Saronic Gulf and the Piraeus, with its central point of white where the marbles of the Acropolis flash in the sun. What place can equal Athens for studying the whole marvellous history of Attica? What a change is effected in every student's mind when first he can substitute the glorious panoramas which he beholds from the Attic hills, from Aegina, or from Salamis, for the maps which have hitherto represented these scenes to his mind!

"I shall never forget the sensation when Kiepert's map of Laconia suddenly vanished from my thoughts at the first sight of the valley of the Eurotas and Taÿgetus; nor when the puzzling topography of Boeotia cleared itself up as I saw it gradually unfolded from the citadel of Chaeronea, from the mighty fortress of the Minyan Orchomenos, and from Thespiae, Plataea, and the Cadmea of Thebes; nor when a black spot on the map was replaced by the snow-capped Parnassus himself, standing in all his dignity as sentinel over the great plain of Boeotia, the first sight that meets the traveller's eye when he enters the plain, and the last that vanishes as he passes into the hollows of Cithaeron on the road from Thebes to Athens.

"I have selected these points chiefly at random, to answer the question which is sometimes asked, What are our students expected to do in Athens? Every one will of course choose the subjects which he will study according to his tastes and his interest in literary, historical, topographical, or architectural questions. But no one will find any lack of subjects; and I am sure that neither

the student himself, nor the school or college in which he teaches on his return will ever have reason to regret the time that he spent in Greece."

"I wish to make a special appeal at this time in behalf of our School, because we are now at a crisis in our affairs when it is of the highest importance that we should at least begin the erection of a building in Athens during the coming year. The Greek government has most generously offered us a piece of land on the slope of Lycabettus, near the building of the French School, and adjoining the lot recently granted to the English School; and it behooves us to show that we are disposed to accept this liberal offer without further delay. It is a wretched policy for us to hire our present expensive quarters from year to year at a constantly increasing rent, while the land upon which we may now build a permanent home for the School is rapidly becoming occupied by new streets, and its price is as rapidly rising. If we reject the kind offer of the Greek government, or allow it to lapse by inaction, we shall never have an equally good opportunity to secure a house in Athens. If we accept it, we shall gain the dignity which will belong to γεωμόροι at Athens, and we shall save the annual rent of a piece of land valued at more than $10,000.

"When a similar offer was made to the committee of the British School, a large and enthusiastic meeting was at once held in London, under the presidency of the Bishop of Durham, at which it was unanimously voted to accept the land, and to use the £4,000 already subscribed for the School in erecting a house on Lycabettus; and Mr. Penrose, on his visit to Athens this year, was to make plans and begin work. At this meeting one of the strong motives urged for immediate action was the noble example of the American School, and the disgrace of allowing England to be behind us in this race. According to the report in *The Times*, —

"'The Bishop of Durham said that circumstances to which the report alluded had occurred since this scheme had first been mooted, which had very considerably altered their position. It now touched our honor as Englishmen very nearly that this scheme should be carried out without delay. France and Germany had long been in the field. France had her school, and Germany her institute, and now America likewise had forestalled us in this race. That new country, notwithstanding the vast and absorbing interests of the present, notwithstanding the boundless hopes of the future, had been eager to claim her part in the heritage. While all the civilized nations of the world, one after another, had established their literary councils at Athens, should England alone be unrepresented at the centre of Hellenic culture? It might have been expected that England would have been foremost in the field. In speaking of altered circumstances, he had not alluded only to the generous rivalry of America, which had outstripped us, but he had referred likewise to the important fact that the Greek government had offered a site for the School. This was a most generous act, and ought not long to remain unrecognized. It was of double value; not only was it a relief to their finances, but also an assurance and a pledge of a hearty welcome to them. We should indeed have occasion to hang our heads and blush for shame if it remained a day longer a dead letter. There was indeed every need for such an institution. . . . It was a great satisfaction to know that the universities were taking up the study of archaeology, making it part of their examination system, and so endeavoring to promote its spread. But what we wanted was to connect ourselves directly with the heart of Hellenic culture,

so that its very life-blood might flow through our veins, and this we should gain by the establishment of the School at Athens.'

"By a slight change these words will refer to our own present position. Can we, now that we have placed ourselves foremost in this race, consent to allow England to reach the goal before us, and to let our own example be used as a stimulus to urge her to outstrip us? Can we, after three years of honorable life in Athens, now consent to play the sleeping hare in the race with the tortoise? I feel sure that this will never be permitted when the urgent needs of our school are once known to the friends of learning in this country. We began our enterprise, as I have explained, in a peculiarly American way, — perhaps not very unlike the way in which some of our great Western railways are said to have been built, on the credit of bonds payable in the next century. We could not have begun it in any other way, at least for many years; and now that we have shown the necessity for the school, and the possibility of having one, we find it necessary to call on our friends to subscribe to our stock, that we may pay off our mortgage, as many a Western railway has done before us. We have followed the sage maxim of Aristotle, that 'whatever we have to learn to do, we learn by doing'; we learn to build a house by building a house; we learn to found a school by founding a school.

"For our full endowment we need a house in Athens, and also a permanent fund of $80,000 or $100,000, the income of which will pay a permanent director, supply the library with its annual needs, and defray the other expenses. Our School can never aspire to the rank which the French and German Schools now hold, unless it can keep a director in Athens who can aspire to be the peer of Foucart and Köhler; and it is not too much to say, that this can never be secured by sending a new man each year to take charge of the School. At the end of a year, our director will always feel that he has spent his whole time in preparation, and that he is just ready to begin his work in earnest; but he must then give place to his successor, who will repeat the same experience. But until we can secure our full endowment, we must be content to remain under this disadvantage, and to depend a few years longer upon the annual directors with whom the liberality of our supporting colleges supplies us. But we cannot safely postpone the more pressing call for a fixed home in Athens; and we cannot risk the combined danger of rejecting the offer of the Greek government, and of depending on our present annual subscriptions while we are paying rent for land which we might own without expense. For the house, furniture, and a fund for repairs and future enlargement, we need the same sum which the British School will invest in their proposed building, or $20,000. Of this amount about $4,000 has already been given us; and I again call on all who can either contribute themselves or induce others to contribute, to see that the remainder is provided in time for us to begin our building during the coming year. Will not some one friend of learning seize this rare opportunity to do a great service to letters, and connect his or her name imperishably with Athens, by erecting a house on Mount Lycabettus, which, by an inscription in classic Greek on Pentelic marble, shall testify this generosity to future generations of the many nations which visit that famous height?"

At the close of the Address, the Association adjourned to Wednesday, July 8, at 9 A.M.

NEW HAVEN, CONN., Wednesday, July 8, 1885.

MORNING SESSION.

The President called the Association to order, and the reading of communications was at once resumed, at 9.20 A. M.

4. The Tibeto-Burman Group of Languages, by Professor John Avery, of Bowdoin College, Brunswick, Maine.

The extensive group of related tongues which has been called by recent writers Tibeto-Burman lines the northern and eastern border of Hindustan, and stretches across Farther India into the westernmost provinces of China. Roughly speaking, this linguistic domain is bounded by 72° and 102° of east longitude, and by 10° and 35° of north latitude; so that geographically, and, as will appear, linguistically, the group lies midway between the principal isolating and agglutinative languages, and forms, so to speak, the step by which we ascend from the lower to the higher type of structure. It is, therefore, the relation of these languages to a general philosophy of human speech, and not their historical prominence, that entitles them to attentive study.

The scanty knowledge which we possess, as yet, of many of the tribes occupying this region, renders hazardous any attempt to fix precisely the limits of the group, or to name its subdivisions, except in a general way. We shall, therefore, in this abstract, follow a geographical order, noting in the fewest possible words the salient features of the most interesting languages or groups of associated dialects.

We begin with the Tibetan, whose standard, though most corrupted, dialect is spoken in the region of Lhassa; but which, in much variety of usage, encroaches on Chinese territory in the east, and overlaps Cashmere and the Panjab in the west. Literary culture came to Tibet from India in the seventh century A. D. The alphabet, derived from the same source, is syllabic, and has thirty characters, not including the subjoined vowel-signs. It represents some sounds not heard in *devanāgarī*, but has neither the cerebral row of mutes, nor the sonant aspirates. A striking peculiarity of Tibetan is its silent consonants, witnesses to a pronunciation which is bygone, save here and there in the dialects. To some extent, these letters serve the purpose of inflection. Case relations are denoted by added syllables, some of which retain their form and sense as independent words, and others have been degraded into servile particles. Adjectives, when they precede their substantive, take the genitive form, as abstract nouns of quality; but when they follow, assume the endings of declension, while the substantive is unchanged. The language has no possessive or relative pronoun, the genitive of the personal pronoun supplying the former, and a participle or independent sentence the latter. The verb is poor in forms, except participles and gerunds. It has neither person, number, nor voice; is always used impersonally, — what we call the subject being in an oblique case. Distinctions of tense are denoted by processes analogous to true inflection. The verb stands last in the sentence; postpositions take the place of prepositions; conjunctions are seldom used, on account of the preference for participial constructions; tones eke out scanty inflections, but do not form an important feature of the language.

Descending the southern slope of the great range, we come upon numerous small tribes, whose physical appearance and speech betray their relationship to the Tibetans, as well as to tribes more remote. They are found on the rugged slopes or the swampy lowlands from the Kali River, long. 80°, eastward beyond British India into Burma. On the uplands of Nepal are the Sunwar, Gurung, Magar, Murmi, Newar, Kiranti, and Limbu; lower down, the Bramhu, Kusunda, Chepang, and Vayu; next eastward, the Lepcha and Bhutanese. Only three of these tribes — the Newar, Limbu, and Lepcha — use alphabetic characters, and that to only a small degree. Though most of the languages of this region have a simple word-structure, bringing them near the level of the isolating tongues, the Kiranti and Vayu present a striking contrast. The personal pronouns have three numbers and a twofold form — exclusive and inclusive — for the first dual and plural. They likewise have distinct forms as they are used substantively or as suffixes. The verb has a remarkable development, for, though poor in tense-forms, it has a profusion of forms expressive of the relations of subject to object. Participles, too, vary according to the tense of the principal verb. Altogether, the possible forms of a Kiranti verb amount to several hundred. The existence of a language having so complex a structure in the midst of tongues equally marked for poverty of forms, presents an interesting ethnological and linguistic problem. The Lepcha has been greatly influenced by the Tibetan, from which it received its literary cultivation; but it has a distinct character of its own. Its words are mostly of one syllable; but derivation and composition are familiar features of the language, and examples of true inflexion are not wanting. The Bhutanese is merely a dialect of Tibetan. In the swampy region at the foot of the range are the Koch, the Bodo or Kachari, and the Dhimal tribes. The Koch language has nearly disappeared, and been replaced by corrupt Bengali. The Kachari and Dhimal closely resemble the Lepcha in type of structure. Following the range eastward, we find a succession of tribes whose languages, though not much studied yet, are believed to have a place in this group. The names are, in order of location, Akas, Dophlas, Miris, Abors, and Mishmis. On the eastern border of Assam are the Singphos, who under the name of Kakhyen extend across upper Burma into Yunan. On the southern border of Assam are the numerous Naga tribes, the Mikirs, and the Garos. The Garo is closely allied to the Kachari, which we found in Northern Bengal. It has the "exclusive and inclusive" forms of the first personal pronoun, as does the Kiranti; it has a negative conjugation of the verb; it employs infixes instead of prefixes or postfixes as modifiers of its verbs; it has no relative pronoun, except as one is sometimes borrowed from the Bengali. South of Assam are many languages and dialects of the same general type; but those belonging to the wilder tribes are scarcely well enough known to be classified with confidence. The most familiar names are the Manipuri, Khyeng, Kumi, Mru, Banjogi, Lushai, and Shendu. The position of the Karen dialects of British Burma is not yet settled, since they present features of both the isolating and agglutinative languages. The Burmese is the last name to be mentioned in this group, and has been too often described to need detailed examination. It resembles the Tibetan, not only in the kind and degree of its literary cultivation, but in many features of its structure. Its pronunciation has, like that of Tibetan, departed far from its written form. It has fewer silent consonants, but makes larger use of tones.

In place of further details, for which we have no space, the following compendious statements will give a general idea of the group as a whole.

1. The Tibeto-Burman alphabets want the Indian cerebrals and sonant aspirates, except so far as these have been introduced for writing foreign words, and in that case they lose their distinctive pronunciation. Both classes of sounds are found in the Santal, a Kolarian language of Central India, and in the Telugu, Canarese, and Malayalim of the Dravidian family. The Tamil has discarded aspirates.

2. These languages are not so dependent upon position to express the relations of the parts of a sentence as are the languages on their eastern border. Besides proper suffixes, prepositional words, derived from various parts of speech-mostly nouns, are much used, and regularly follow the words which they limit.

3. Pronouns have the same declension as nouns. A proper possessive pronoun has been developed from the genitive of the personal pronoun in a few instances, but ordinarily the simple genitive is made to suffice. So the Santal inflects the genitive of its personal pronoun, while its near kindred, the Kol, uses it without inflection. Inclusive and exclusive forms of the dual and plural of the first personal pronoun occur here, as in Central and Southern India. The absence of the relative pronoun, as an original possession, in these languages, is also a feature in which they coincide with Kolarian and Dravidian speech.

4. The distinction between verb and noun is not so clearly maintained as in the inflecting languages. Where we use a verb, these tongues oftener employ a verbal noun, with copula expressed, or more often understood, and agent in the instrumental case. In a majority of the languages the verb marks neither person nor number; a few do it in part, and the Kiranti alone wholly. Tense is generally denoted by suffixed syllables, which are more or less distinctly independent words, rarely by prefixes or a change of radical vowel. A negative conjugation, like that in the Dravidian verb, occurs in a few languages, but is not universal.

5. There is a customary order of words in the Tibeto-Burman sentence, but it admits of some variation. The verb stands last, and the subject at or near the beginning. The adjective commonly follows the substantive, taking the signs of declension; or may precede it, in which case it is treated as a noun of quality, in Tibetan having the genitive suffix. The last is the ordinary position of a limiting noun. The same rules of position are observed in the Kolarian and Dravidian languages, except that there the adjective precedes the substantive. The Chinese agrees with the Tibeto-Burman group in placing the limiting before the limited substantive, while the Mon-Anam languages of Indo-China reverse the order. In some other particulars the Tibeto-Burman and Mon-Anam groups agree as against the Chinese, from which it appears that the order of words in the sentence is not conclusive evidence of genetic relationship.

5. The Neo-Grammarians ("Junggrammatiker"), by Professor F. A. March, of Lafayette College, Easton, Penn.

This paper was in the form of comments on the articl on Philology by Professor E. Sievers in the ninth edition of the Encyclopaedia Britannica. He givs three characteristics of the neo-grammarians: —

1. They abandon glottogonic problems as insolubl.

2. They object to misleading metafors from organic development.

3. They hold that living languages ar the ones in which to obtain insight into the working forces of language.

As to the first and second, the old field and old method hav been workt long and hard. It is natural to turn to new fields and new methods; but in so far as there is an implication in the form of statement that Bopp and his school hav solvd no glottogonic problems, and that Schleicher and others hav never been led to important discoveries by analogies between languages and organic beings, objection is taken.

As to the third position all ar agreed. Among the forces found at work two ar dwelt on by Prof. Sievers as specialy prominent: phonetic variation, and formation by analogy. The first is the substitution of one sound or sound-group for another. He labors to show that such changes admit of no exceptions. This may answer as an elementary guide for framing laws from statistical tabls of fenomena; state the laws so as to cover the fenomena. But it is desirabl to aim at induction of powers; and Sievers seems to think that powers do operate, and change at once the mode of articulation of every man speaking a language in every word he speaks. Americans ar in the midst of changes, and ar abl to observ that the spred of new sounds is gradual, like other habits. There is a fair field here for stoicheiogonic investigation.

As to analogy, Sievers' main point is that it is apt to be entirely arbitrary and irregular. He givs exampls of peculiar inflection: as, *foot, feet*, compared with *book, books; ride, rode* compared with *bind, bound*. These, he says, ar entirely arbitrary. They must be accepted as facts not allowing any special explanation.

The reasns for these changes wer givn, and it was said that everything in language has its reasn, and should be hunted to its laws of mind and matter. Science should not deliberately set apart a refuge for ignorance.

Objection was made to the word *level* for the operation of analogy; *conform* was thought better. The minority conform to the majority. Forms may wether to a level from fonetic decay, or from other external causes.

Sievers says that the most brilliant result of the recent researches is the discovery that the system of etymological vowel change which pervades the Aryan inflection was chiefly developed under the influence of stress and pitch. "This," Prof. March said, "I read with great satisfaction. I, too, am a junggrammatiker of a primaeval period. But as I read on the world seems to turn topsy-turvy. The old linguistic tree is bottom up. *Vid* and *vaid, bhug'* and *bhaug'*, ar here, but the *vaids* and *bhaug's* ar now the roots from which *vids* and *bhug's* spring. It might be said, that, if it is agreed that unaccented *i* corresponds with accented *ai*, it makes no difference which is calld the root. But a comparison of the words in Sanskrit, Greek, and the like, containing these sounds, as wel as a general comparison with the sounds of all languages, indicates *i* and *u* to be primitiv sounds, while a study of English and other living languages assures us that historicaly *ai* follows its *i*, *au* follows its *û*; *lîf* was before *laif*, *nû* before *nau*. Sievers says that the English *milord, milady*, against the usual full *my* (*mai*), is an exact parallel to Sanskrit *vidmá* against *vaida* But *my* (*mai*) is a lengthening of *mî*, so then *vaid* of *vid*."

Remarks were made upon the paper by Professor Whitney and Mr. Cyrus Adler, and in reply by Professor March.

Professor Whitney said: —

While the so-called neo-grammatical movement is indeed a highly interesting and important one, having brought much new truth to light, and wholesomely stirred up many questions which by prevalent opinion had been erroneously regarded as settled, its range and scope should not be mistaken nor its originality overstated. The truth of the three characteristics just laid down he could by no means admit. If the first, indeed, were a true characteristic, it would constitute the irrevocable condemnation of the new movement; since every language is the product of a series of historical changes, and to trace these out and to discover their causes is the scientific study of language. The question whether *vaid* precedes *vid*, or the contrary, is a "glottogonic problem" as much as any other; and all the other questions as to what precedes what in language-history are of the same sort, and have an equal claim to be investigated; to set aside any part of them as insoluble, is simply unscientific. As regards the second point, if one really understands what language is, and what are the forces that shape its growth, and how in general they act, he is in no danger of being misled by organic metaphors, but may find them interesting, and sometimes even instructive. That caution as to using such metaphors is a peculiar merit of the new school is a claim without any foundation whatever. Then, that one must study the growth of living languages in order to understand that of older ones, is a truism; no one who knew anything about the science of language has thought of disputing it. And there are phases of it which are calling vainly for the attention of the new school. From it results, for example, that agglutination, with consequent adaptation, is the only process by which grammatical structure in language can be brought into existence; and hence that the glottogonic problems relating to the genesis of forms occupy as high a place in linguistic science as does grammatical structure in the development of language.

General opinion attributes to the new school, as the most essential article in its creed, the invariability of phonetic change. But that is not an induction, nor a deduction; it is simply an assumption, a hypothesis as yet undemonstrated, and probably never to be demonstrated. Such a doctrine should be the final goal, not the starting-point, of a new school.

6. The Genealogy of Words, by Professor Morton W. Easton, of the University of Pennsylvania, Philadelphia; read, in the author's absence, by Professor W. B. Owen, of Lafayette College.

This paper was, in substance, an extension of the principle of analogy to nearly the whole field of phonetic changes and law.

The syllables and the groups of letters most frequently used determine the direction of alteration in form. *These, and not the single sounds, are to be regardea as the phonetic units*, and a change in the phonetic constitution of a word should be, in the great majority of cases, attributed not to ease in enunciation alone, but to unconscious imitation of some other more frequently uttered vocable. Ellis attributes the change of *pers-u-ade* to "*perswade*" to the influence of the current combination *qu* (sounded *kw*). This may be taken as a type of the whole process.

A great variety of phenomena were attributed to this process: sporadic

changes, such as the confusion of *clad* and *glad* (including *clory* for *glory*); of *kin* and *can;* the displacement of *-ung* by *-ing;* of the proper representative of *-ig* by *-ow*, as in *hallow* for *hālig;* palatalization; labialization; inorganic sounds; anaptyctic sounds; cases such as the initial vowel in *δροφος*, etc., etc.

Support for this theory and fuller illustration were sought in the history of the changes of the English vowel system, especially of *a, e, i.*

7. The Appeal to the Sense of Sight in Greek Tragedy, by Professor Rufus B. Richardson, of Dartmouth College, Hanover, N. H.

There is in Greek tragedy an evident lack of scenes of violence such as are common on the modern stage. Things of this sort are relegated to the parts of the *ἄγγελοι* and *ἐξάγγελοι.*

A widely prevalent view is that the Greeks avoided, on principle, presenting the horrible to the eye, either because it was too overpowering, or, on the contrary, (e. g. Köchly, Vorlesung über Sophokles' Antigone,) because it was not so effective a means of reaching the soul as vivid narration. Whether the Greeks were ruled by any such principle is doubtful. A review of the passages in Aristotle's Poetics bearing on this point, especially vi. 7, 8, vi. 19, and ix. 6, fails to establish an affirmative.

Turning to the Greek tragedies themselves, we find the Bacchae of Euripides completely upsetting any preconceived notions that horrible scenes must be avoided. Everything in that play leads up to the crowning horror presented when Agave appears bearing the bloody head of her son.

A review of all the extant Greek tragedies yields the following result. Presentation of the horrible to the eye is avoided only when it would be difficult to maintain the *illusion* in the matter. Bloody bodies are shown, even if, as in Euripides's Andromache and Suppliants, they are thought of as brought from some distant place for that very purpose.

Suicide might be successfully represented, but anything like a combat was almost incapable of successful representation by Greek actors, who were practically set up on stilts, with the danger of an awkward fall ever threatening them. (Lucian, Somnium, 26.) A laugh inadvertently raised by a too venturesome attempt at representation would be fatal to the proper effect of the piece. Moderns sin against this principle, and pay the penalty for it. Gessler's fall from his horse, in Schiller's Wilhelm Tell, generally raises a laugh.

The much quoted passage from Horace, Ars Poetica, 179 ff., though often taken as discriminating against scenes of bloodshed *per se*, really sets forth the need of care not to break the illusion of the spectator. To show the transformation of Cadmos and Procne, or the doings of Atreus and Medea, awakens incredulity, and so disgust. *Incredulus odi* covers all four cases.

Remarks were made upon this paper by Dr. E. G. Sihler, and by Professors M. L. D'Ooge, W. W. Goodwin, and W. T. Hewett.

8. The Value of the Attic Talent in modern Money, by Professor W. W. Goodwin, of Harvard College, Cambridge, Mass.

In the table at the end of Smith's Dictionary of Antiquities the value of the Solonic talent is given as £243 15*s.* and this has generally been accepted as

the correct value in England, while the corresponding value of $1,200 is usually adopted in the United States. The difference between this value and Boeckh's estimate of 1,500 Prussian thalers for the Attic talent, is surprising. If we estimate the weight of pure silver in the talent at 404,283 grains Troy (the drachma having 67.38 gr.), we get the equivalent of about $1,088 in the present U. S. "standard" dollars (each containing 371.25 grains of *pure* silver), or less than $1,000 in honest money. This agrees with the only fair estimate in English money, by which 404,283 grains Troy are equivalent to £200 when pure silver is worth 57*d.* per ounce Troy and English standard silver (.925 fine) is worth 52.7*d.* When this was the ordinary value of silver, the weight of silver which made an Attic talent (about 57¾ pounds avoirdupois) would have been worth about £200, or less than $1,000. Within the last few months, however, silver has fallen about ten per cent below this value (to about 47½*d.* per ounce), which of course reduces the *present* value of the talent (on a gold basis) to £180, or less than $900.

The cause of the error of more than £40 in the estimates in Smith's Dictionary is not far to seek. In the article *Drachma*, the weight of the Solonic drachma is assumed to be 65.4 grains; and this is divided by the weight of pure silver in the English shilling (80.7 grains) to get the value of the drachma, which thus appears to be 9.72*d.*, making the value of the talent (6,000 drachmas) £243. But if 80.7 grains of pure silver were worth a shilling, an ounce Troy of silver (480 gr.) would be worth nearly six shillings, or 72*d.* It is plain that the error here arises from comparing the Attic drachma, which is reckoned at its full value as pure silver, with the shilling, which is merely a subsidiary coin (strictly limited as legal tender) containing less than ninepence worth of silver; and the error thus introduced is of course multiplied *six thousand times* in estimating the value of the talent.

9. The Vowels *e* and *i* in English, by Benjamin W. Wells, Ph. D., of the Friends' School, Providence, R. I.

The writer traced the origin of Old Germanic *e* to IG. a^1, and of OG. *i* to IG. *i* in most cases, but endeavored to show that there was a considerable number of cases where OG. *i* was derived from an IG. a^1, and a very few where OG. *e* was from IG. *i*. The development of OG. *e* and *i* in OE. was then shown; under what conditions OG. *e* became in OE. *éo*, *ie*, or *ié*, and when it remained *e*; how *i* remained *i* in most cases, but also became *e* and *éo* in OE.

The second section showed the origin of the OE. sounds *i*, *ie*, *ié*, *e*, *éo*. *i* was shown to be from OG. *i* in most cases, but also from *e* and *ī*. OE. *e* was traced to OG. *a* (umlaut), to OG. *e*, and to OG. *i* and *ai* in rare instances. OE. *éo* was shown to be from OG. *e* and *i*, without regard to their origin, and from no other source; *ie* was regarded as the umlaut of *éo*, showing that the "breaking" of *e* to *éo* was previous to the umlaut in Germanic; *ié* was shown to be a late and irregular development from *e* after palatals.

The next section spoke of the development of OE. sounds in NE. The ME. was passed over, as adding little to our knowledge except in exceptional cases. The NE. sounds were made the basis of the comparison, and the notation used for these was that of Brücke: ĭ *hit*, i *heed*, eᵃ *tell*, e *hate*, æ *hat*, a *far*, oᵃ *or*, o *home*, ŏ *not*, ŏᵉ *fur*, ŭ *hut*, u *shoot*, ai *kite*, au *cow*. OE. *i* was pronounced in

NE. usually *ī*, but often *i*, *ea*, *ai*, *ȳ*, *u*, *o*. OE. *e* was usually pronounced *ea*, but also *i*, *e*, and less commonly *ī*, *ae*, *a*, *ō*, *ȳ*. OE. *īe*, *ié*, were found, with rare exceptions, to be treated as if only the accented vowel were present; that is, as if they were *i* and *e*. OE. *éo* was very irregular in its development, being represented by the sounds *ī*, *i*, *ea*, *ae*, *ai*, *a*, *oa*, *o*, *ō*, *ȳ*; and these variations do not always admit of satisfactory explanation. OE. *éa* also presents many difficulties. We find *ea* and *a* frequently for this sound, but also *oa*, *ae*, *e*, *ō*, *o*. OE. *ae* is usually pronounced *e*, *oe*, or *a* in NE., but also *i*, *ea*, *o* , *o*, *ō*, in some cases. The changes in sound are usually due to following consonants, liquids and *w* being especially active. The spelling is in general dependent on the sound, though it is much more irregular.

In the fourth section the NE. sounds were traced back to their OE. origins. NE. *ī* was found to come from *i* or *y* usually, but also from *ī*, *ȳ*, *ē*, *æ*, *ēa*, *ēo*, and *u*, in exceptional cases. The sound *e* in NE. is usually from OE. *a* or *æ*, but also for OE. *e*, *éa*, *y*, *ē*, *ēa*, *eā*, *ā*, *ōē*. The sound *ea* is used for OE. *e*, *ié*, regularly, and also for *i*, *éo*, *éa*, *ae*, *a*, *o*, *y*, and *īe*, *ē*, *ēo*, *ēa*, *ōē*, *eā*, *ō*, in exceptional cases. The sound *ae* is used in NE. for OE. *a* and *ae*, and sometimes for *e*, *éo*, *éa*, *ē*, *ēa*, *ōē*, *ā*. Notice was taken throughout of the spellings used for the NE. sounds.

The fifth section treated of the NE. letters. Of the thirty-two signs for vowel sounds, nine were found to be French, and used only in foreign words. Of the remaining twenty-three, the following twelve were treated here: *i*, *e*, *y*, *ai*, *ay*, *ea*, *ee*, *ei*, *ey*, *ew*, *ie*, *ye*. *i* has the sounds *i* and *ai*, and is the usual representative of those sounds. *e* is used for the sound *ea* regularly, often for *ȳ*, and sometimes for *i*; it stands for seventeen OE. sounds. *y* is used for *ī*, *ai*; it is the final sign for NE. *i*. *ai* and *ay* are used for the sounds *e*, *ea*, and in French words for the sound *ai*; nearly always this digraph stands for a vowel + *g* in OE. *ei*, *ey*, occur with the sounds *i*, *e*, *ea*, *oi*, but are never regular signs for any OE. vowel. *ea* has the sounds *i*, *ea*, *Oe*, and rarely *e*; it is used for fourteen OE. sounds. *ee* is always sounded *i* except in the short pronunciation of *been*; it is used for seven OE. sounds. *ie*, *ye* are used with the sounds *i*, *ī*, *ai*, *ea*, but never regularly. *ew* is used for the sounds *u* and *o*, and always represents a vowel + *w* in OE.

The general tendency of the vowel changes is from *a* toward *i* in the period from OG. to OE.; and since the OE. times the tendency is downward toward *a* and *u* for short vowels, and toward the extremes *i* and *u* in the long vowels.

10. An unpublished Introduction to Hesiod's Works and Days, by Professor Isaac H. Hall, of New York, N. Y.

One of the three classic manuscripts recently acquired by the Astor Library is a paper manuscript of Hesiod's Works and Days, of the thirteenth century. It is clearly and beautifully written, and contains an Introduction — filling two pages of twenty-three lines each, or forty-six lines in all — which is said to be found in none of the many editions of the poet, and to have been hitherto unknown. The MS. consists of thirty-four leaves, each 24½ × 17 centimeters in dimension, and presents a singularly good text. On the fly-leaf at the beginning is written in uncials, all in one line except the last word, —

ΚΑΚΗ' ΓΥΝΗ' ΜΕΓΑ ΠΗ^ΜΑ ΤΩ^Ι 'ΑΝΔΡΙ'· 'ΙΗΕΣΟΥ^Σ ·⁝· ΧΡΙΣΤΟ'Σ·

— : ΜΑΡΙ'Α : —

The first 274 verses of the poem, with also verse 499, have an interlinear gloss, written in red ink, which gives a paraphrase of Hesiod's expressions; sometimes explaining almost every word, but not always either explaining or repeating. The following half-dozen lines (three pairs), taken from the beginning of the poem, show its character. This particular portion is selected as a specimen because of its bearing on the Introduction above mentioned. The gloss is written above its line: —

1ª ὦ ἀπὸ τοῦ ὄρους ποιήσεσι δοξάζουσαι
1 Μοῦσαι πιερίηθεν ἀοιδῆσι κλείουσαι

2ª ἄγετε εἴπατε ὕδιον τὸν ὑπανοῦσαι
2 δεῦτε δὴ ἐννέπετε, σφέτερον πατέρ' ὑμνείουσαι

3ª δι' οὕτινος ἄνδρες ὁμοίως ἀνώνυμοι ὀνοματοὶ
3 ὃν τε διὰ βροτοὶ ἄνδρες ὁμῶς ἄφατοί τε φατοί τε

In line 3 of the poem above, ἄφατοί was written ἄφωτοί, but corrected by the scribe himself.

The Introduction is as follows: —

Ἡσίοδος:

Line 1. Ἰστέον ὅτι πάντα οἱ Ἕλληνες ἃ δύναμιν ἔχοντα
2. ἑώρων οὐκ ἄνευ ἐπιστασίας θεῶν τὴν δύναμιν
3. αὐτῶν ἐνεργοῦντα ἐνόμιζον· ἐνὶ δὲ ὀνόματι, τό τε τὴν
4. δύναμιν ἔχον καὶ τὸν ἐπιστατοῦντα τούτο θεὸν
5. ὠνόμαζον· ὅθεν Ἡφαιστον ἐκάλουν, τό τε διακονικὸν τοῦτο πῦρ, καὶ τὸν ἐπιστατοῦντα ταῖς διὰ
7. τούτου ἐνεργουμέναις τέχναις· καὶ Δήμητρα
8. τὸν σῖτον καὶ τοὺς καρποὺς· καὶ τὴν δωρουμένην
9. τούτους θεὸν καὶ ἐπιστατοῦσαν αὐτοῖς. καὶ Ἀθηνᾶν
10. τὴν φρόνησιν καὶ τὴν ἔφορον τῆς φρονήσεως θεὸν· καὶ
11. Διόνυσον τὸν οἶνον καὶ τὸν διδόντα τοῦτον θεὸν·
12. ὃν καὶ ἀπὸ τοῦ διδόναι τὸν οἶνον ὁ Πλάτων πα-
13. ράγει, καὶ διδό|νυσον τοῦτον ποιεῖ· εἶτα καὶ Διό-
14. νυσον· καὶ Εἰλειβυίας τοὺς τόκους καὶ τὰς ἐφορώσας
15. τοὺς τόκους θεὰς· καὶ Ἀφροδίτην τὴν συνουσίαν·
16. καὶ τὴν ἐπιστατοῦσαν ταύτῃ θεον· κατὰ τοῦτο καὶ Μοῦσας
17. ἔλεγον· τὰς δὲ λογικὰς τέχνας· οἷον ῥητορικὴν·
18. ἀστρονομίαν· κωμοδίαν· τραγωδίαν, καὶ τὰς
19. ἐφόρους καὶ περιόχους τούτων θεὰς· ἃς ἐνταῦθα
20. καλεῖ ἀπὸ τῆς Πιερίας τοῦ ὄρους ἔνθα ἐτι-
21. μῶντο· αὐτόθι δὲ καὶ γεγενῆσθαι αὐτὰς
22. ἔλεγον· καὶ φησὶν· ὦ Μοῦσαι αἱ δοξάζουσαι
23. τῇ δωρεᾷ τῶν ὑμετέρων ὠδῶν οὓς ἂν
24. ἐθέλητε δή· αἱ ἔργα ἔχουσαι ὑμνεῖν τὸν ὑμέτερον
25. πατέρα ἠδὲ τὸν Δία· ἄγετε εἴπατέ μοι ἀπὸ τῆς διερίας,
26. ἐκεῖνον δι' ὃν οἱ ἄνδρες ὁμοίως βρότοι ἠδὲ φατοὶ·
27. ἀνώνυμοι εἰσὶ καὶ ὀνομαστοὶ, καὶ ῥητοὶ καὶ ἄρρητοι
28. ἐκ παραλλήλου· τὰ αὐτὰ γὰρ καὶ ταῦτα δύναται,
29. ἃ τὸ ἄφατοι καὶ φατοὶ· εἶτα παράγει τὰς μοῦσας

30. ὥσπερ ἀποκρινομένας αὐτῷ· καὶ τὸν Δία λε-
31. γούσαις εἶναι τούτων αἴτιον· πρὸς ὃν ἀποβλέ-
32. ψας αὐτὸς, αἰτεῖται ἀκούειν αὐτοῦ· εἶτα
33. ἄρχεται τῆς πρὸς τὸν ἀδελφὸν παραινέσεως· καὶ ταῦτα
34. δὲ οὐ μικρὰν ἔχει πρὸς αὐτὸν τὴν παραίνεσιν· ἐν οἷς
35. οὐκ αὐτομάτοῦ δείκνυται τὰ πράγματα γίνεσθαι·
36. ἀλλ' εἶναι τὸν διὰ τούτων ἔφορον καὶ προστάτην· καὶ τοὺς
37. μὲν δικαίους ἀγαθοποιοῦντας· τοὺς ἀδικοῦντας
38. δὲ, τιμωρούμενον· ἄδικος γὰρ ὢν
39. ὁ Πέρσης καὶ πλεονέκτης,
40. διὰ τούτων ὥσπερ
41. ἀναστέλλεται καὶ
42. παιδα-
43. γωγεῖται δικαιοσύνην
44. προσέχειν τὸν νοῦν· ἵνα μὴ τῆς τοῦ Διὸς ὀργῆς
45. πειρασθῇ· τὴν πλεονεξίαν ὁρῶντος
46. αὐτοῦ: —

In the margin, opposite the end of line 12, is written διατί λέγεται Διόνυσος.

There is no ι subscript, but I have supplied it above. Tachygraphic signs are generally simple, and occur with short words or terminations. Accents (as frequently in MSS.) often have to decide what the termination is (e. g. as between τούτῳ and τοῦτο). Points at the top, middle, and bottom of the line, with the modern comma, are about the only punctuation; and it is doubtful whether the points at the top and bottom of the line are not really intended to be in the middle. Grave accents are written irrespective of punctuation; or rather, as if there were no punctuation, except in one or two instances. Ligatures are few, and generally easy. The breathings of the capital letters are the early ones, namely, halves of the split H; elsewhere they are like the modern ones. Capitals are not used in the body of the Introduction; only with its initial letter and that of its title. *Iota* has the common two points at the top. Hyphens are written where a word is broken at the end of a line. In line 28 (as in line 3 of the poem), ἄφατοι was written ἄφωτοι, but corrected by the scribe himself. In line 21, the reading γεγενιῆσθαι has no mark of correction. In line 38, τιμωρούμενον was written τιμωρούρομενον, but a mark of erasure is drawn through the superfluous letters. In line 13, an irregular perpendicular line is drawn through the word διδό|νυσον, apparently by the scribe, to show its elements. In line 4, τούτο appears to be an error for either τοῦτο or τούτῳ (more likely the latter, though the final ο is written below the τ). In line 16, θεον has no accent written.

Except as here stated, the Introduction is given line for line with the original MS., copying the punctuation, hyphens, accents, and breathings. The few other clerical errors of the scribe are so obvious that it is hardly worth while to note them. I do not deem it necessary to add a translation. The use of ἔφορος is a little noteworthy. (In the poem, line 122, ἔφοροι is the gloss for φύλακες). In line 14, the form Εἰλειβυίας is also noteworthy.

The afternoon session of Wednesday was omitted, that the members of the Association and their friends might make the excursion to

which, on the preceding day, they had been invited by Professor Tracy Peck, on behalf of the resident members of the Association and other citizens of New Haven.

At about 3 P. M., nearly one hundred and fifty persons, members of the Association and friends in New Haven, proceded to Belle Dock, where the barge Juno was in waiting for the party. The sail was down the harbor of New Haven, and eastward upon the Sound till off Brantford, and back to the breakwater, near which the barge passed. The city was reached, after a delightful sail of about four hours, at 7 P. M.

NEW HAVEN, CONN., Wednesday, July 8, 1885.

EVENING SESSION.

In the temporary absence of the President, the Association was called to order by the Secretary at 8.10 P. M.

The reading of papers was at once resumed: —

11. The Roots of the Sanskrit Language, by Professor W. D. Whitney, of Yale College, New Haven, Conn.

Passing over all the difficult questions attaching to the word "root," and using it simply in its current and sufficiently understood sense, there are certain special difficulties attending the identification of the Sanskrit roots, arising chiefly from the fact that the Hindu grammarians have set up a faulty, and in great part fictitious, list of them. Not only do these authorities omit a considerable number of real roots, found in the older memorials of the language though obsolete in the classical period, but, what is much worse, they add a very considerable number — even the larger half of the whole list — that are unquotable from the literature, and will always remain so, being in the main evidently fictitious, and in the rest part presumably so. Moreover, as a matter of course, the native writers on grammar make no attempt to distinguish between earlier and later roots, between (apparently) primary and secondary roots: all are given upon the same dead level. Hence it has been very difficult for the Indo-European etymologist to distinguish between what he has and what he has not a right to use in this body of material; and, to help establish the history of a word, there has been in numberless instances a "Sanskrit root" called in which has not the smallest right to figure as such, being either the figment of a grammarian, or something that shows itself for the first time in some recent period of the history of the Sanskrit itself. The great Petersburg Lexicon of Sanskrit (with its abridgment and supplement, Böhtlingk's minor Lexicon, not yet quite finished) furnishes the means at present of bettering this state of things, by distinguishing the genuine and quotable from the non-authentic, and by illustrating the period of use of any given root. But the Lexicon is comparatively

a rare book, and not easily usable, even when accessible, except by one who is a practised Sanskrit scholar; nor, in very many cases, is it easy for such a one to bring its evidence to bear upon a given point. The writer has been engaged during some years past in endeavoring to facilitate the task, by preparing (as a supplement to his Sanskrit Grammar) a work entitled "The Roots, Verb-Forms, and Primary Derivatives of the Sanskrit Language," which is just now (July, 1885) leaving the press at Leipzig. In it are given all the quotable roots, with all the tense-formations made from them that have been met with hitherto in use, and with their derivatives usually reckoned as primary — each and every item being dated according to the period to which it belongs in the history of the language, so far as yet ascertained; and such is the completeness with which the literature has been excerpted, that any further modifications to be made will be only of minor consequence. In order, now, to make the main results of this work, so far as concerns the roots themselves and their place in the language, yet more readily accessible, the writer had drawn off from that work a classified List of Roots, with the briefest possible explanatory statement under each one, and offers it to the Association for publication in its Transactions.

The List begins with those roots which are found in use through the whole history of the language, from the Vedic down even to the latest or classical period; and next follow those which are met with in the Vedas, while they are either restricted to those works, or at least occur only in the older language — since (unless in rare and exceptional cases) it must be among these alone that materials for Indo-European etymologies have a right to be sought. Then follow those that first show themselves at periods later than the Vedic: as in the Brāhmaṇas, the Sūtras, in the epics, and, finally, in the latest period only — the probability of Indo-European value growing less in each successive division. An alphabetic index at the end gives the means of determining the place and period of any given root sought.

It is sufficient to add here a few of the roots, as specimens of the method followed. In the first division, or under the head of roots found occurring at every period, from the Vedic to the classical, the first ones are the following: —

1 akṣ.
Secondary, from **1 aç**. Only sporadic cases.

ac, añc, bend.
Hardly used after B. except in caus. and deriv. Query whether **-añc** (**pratyañc,** etc.) is this root or a suffix.

aj, drive.
Hardly used after S. except in derivatives.

añj, anoint.
Rare in later lang., except pple, caus., and derivatives.

at, wander.
Rare, pers. forms only in RV.; compare **at.**

ad, eat.

an, breathe.
Rarer later; some deriv. common throughout.

arc, ṛc, praise.

arh, deserve, etc.
Grows more common later.

av, favor.
Much rarer later, as also deriv., unless **avi.**

1 aç, attain.
Compare **2 aç** and **1 akṣ**; little used later.

2 aç, partake of.
Probably ultimately the same with **1 aç.**

1 as, be.
Abundant throughout. Few derivatives.

And so on, through the whole list.

It may be added, that the list contains (apart from obviously secondary forms) somewhat over eight hundred roots, just about half of them belonging to the

first division, or occurring in every period of the history of the language; while about a hundred and fifty more are found in the Vedas, but drop out later, at one or another stage in the history. About a hundred and twenty-five occur only in the later language, epic and classical; of these, rather more than half are wanting even in the epics.

On invitation of the President, the Rev. Dr. William Hayes Ward, Editor of *The Independent*, recently returned from the Wolfe Expedition to Babylonia, made a few remarks upon the work and the results of the expedition.[1]

The speaker gave a familiar account of the Wolfe Expedition to Babylonia, stating that it had its origin in the feeling of a number of the members of the American Oriental Society that it was time that steps should be taken to cultivate the interest of American people in the field of Assyrian and Babylonian investigation. A committee had been appointed three years ago to see if an expedition to Mesopotamia could not be provided for, which should, in a preliminary way, examine the field, and report in America whether there was reason to believe that further excavations would be of profit. Miss Catherine Lorillard Wolfe, of New York, gave $5,000 for this purpose, and the speaker was requested by the committee to take charge of the expedition. Dr. Ward left New York on September 6, 1884, and, after spending some days in the British Museum and the Louvre with the Assyrian collections there, went to Constantinople and Smyrna, where he was joined by Mr. J. H. Haynes and Dr. J. R. S. Sterrett, two young American gentlemen who had for several years been devoting themselves to archaeological investigations in Asia Minor. The party then went to Mersin by steamer, whence they went inland, by way of Tarsus, Adana, the old Hittite capital now known as Marash, and Aintab, to Jerabis, the site of the larger Hittite capital of Carchemish. After making observations and taking photographs of exposed sculptures, the party went by way of Urfa, Mardin, and through the Syriac-speaking country of the Tûr Abdîn to Mosul. Here visiting the famous Ninevite centres of Koyunjik, Nebby Yunus, Khorsabad, and Nimrûd, they went down the east side of the Tigris through Arbela and Kerkuk to Baghdad. Thence they passed by way of Abu Habba to the mounds of Babylon and Borsippa, and through nearly the whole of Southern Babylonia, including such famous mounds as Zibliya, Niffer Hammam, Tello, Zerghul, Mugheir, and Warká. Observations were made everywhere with the prismatic compass, for the correction of maps. The party visited nearly all places where excavations have been made, located many sites of old towns never before visited, and made such observations as the limited time allowed, with a view to future work. They also put themselves in communication with all those who made it a business to collect and sell antiquities. Returning to Baghdad with their caravan in season to avoid the spring floods, they crossed over again to the Euphrates at Sakhlawieh, where they discovered the magnificent ruins of the mediaeval Anbar, the site of old Sippara, and thence passed up the west side of the Euphrates by Hit (Issus) and Anah (Anatho) to Ed Deir. Thence they crossed the Syrian Desert

[1] The official report of the expedition will soon be published by the Archaeological Institute of America.

to Palmyra, where they spent several days taking squeezes of Palmyrene inscriptions. Thence they went by way of Emesa to Damascus, and reached the seacoast at Beirut. Everywhere photographs were taken. The expedition was indebted to the Turkish officials everywhere, and to the Turkish government, for much courtesy and attention. The result was a considerable addition to geographical data, and the discovery of many places where there is every reason to believe that excavation would produce rich fruit. A number of tablets and other smaller engraved objects are among the fruits of the expedition.

In accordance with votes of instruction, the following Committees were then announced by the President of the Association: —

Committee to nominate Officers for 1885–86, Professors W. D. Whitney, R. B. Richardson, and W. S. Scarborough.

Committee to arrange Time and Place of next Meeting, Professors F. A. March, T. D. Seymour, and W. G. Hale.

The report of the Treasurer of the Association for the year ending July 7, 1885, was then presented by Professor John H. Wright, Secretary and Treasurer. The summary of accounts for 1884–85 is as follows: —

RECEIPTS.

Balance on hand, July 3, 1884		$635.29
Fees, assessments, and arrears paid in	$718.00	
Sales of Transactions	159.50	
Sales of reprints, etc.	11.75	
Interest on deposits	8.21	
Total receipts for the year		897.46
		$1532.75

EXPENDITURES.

Plates for Vol. XIV. (1883) of Transactions	$325.34	
700 copies of Proceedings for 1883 separate	30.10	
600 copies of Vol. XIV. (Trans. and Proc. together)	107.71	
Reprints of separate articles for authors	21.50	
Job printing	30.80	
Plates for Proceedings for 1884	183.99	
750 copies of Proceedings for 1884	46.60	
Mailing, shipping, expressage, postage, and stationery	55.61	
Miscellaneous (advertising, binding, writing, etc.)	18.50	
Total expenditures for the year		$820.15
Balance on hand, July 6, 1885		712.60
		$1532.75

The chair appointed, as Committee to audit the report, Professor A. Harkness and C. J. Buckingham, Esq.

12. Negro-English,[1] by Professor James A. Harrison, of Washington and Lee University, Lexington, Va.

"The area embraced within the ensuing investigation is the area lying between the Atlantic Ocean on the East, the Mississippi River on the West, the Gulf of Mexico on the South, and 39° north latitude ('Mason and Dixon's line,' a name given to the southern boundary of the free State of Pennsylvania, which separates it from the former slave States of Maryland and Virginia).

"This area now contains between 6,000,000 and 7,000,000 negroes, who speak, in large measure, the English to which attention is drawn in this paper. There are several distinctly marked dialects of this English, — prevailing respectively in Virginia, on the sea-coast of South Carolina and Georgia, and through the middle Southern States, — examples of which are given at the end of the paper.

"It has been impossible to register scientifically the varied phenomena of Negro phonetics or to reproduce the quite indescribable intonation and shades of intonation with which the sounds are uttered; but an effort has been made to approximate a correct reproduction of the pronunciation by an imitative orthography, and by key-words serving to show the dialectal variations of different localities.

"It must be confessed, to the shame of the white population of the South, that they perpetuate many of these pronunciations in common with their Negro dependents; and that, in many places, if one happened to be talking to a native with one's eyes shut, it would be impossible to say whether a Negro or a white person were responding.

"The humor and naïveté of the Negro are features which must not be overlooked in gauging his intellectual caliber and timbre; much of his talk is baby-talk, of an exceedingly attractive sort to those to the manner born; he deals in hyperbole, in rhythm, in picture-words, like the poet; the slang which is an ingrained part of his being, as deep-dyed as his skin, is, with him, not mere word-distortion; it is his verbal breath of life, caught from his surroundings and wrought up by him into the wonderful figure-speech specimens of which will be given later under the head of Negroisms.

"The results of a total abstraction of all means of self-cultivation from the field of Negro life are clearly enough seen in the representations which follow of his treatment of the English tongue. Negro English is an *ear-language* altogether, a language built up on what the late Professor Haldeman of Pennsylvania called *otosis*, an error of ear, a mishearing, similar to that by which Sirâdyhu-d-daula, a viceroy of Bengal, became in the newspapers of the day Sir Roger Dowler! The only wonder is how the Negro could have caught the rapidly uttered sounds of the language spoken around him so truly, and reproduced them so ingeniously, transmitting what he had learned in a form so comparatively unspoiled. He has simply taken the principle of *paresis*, or word-neglect, — a principle by which *maculate* becomes *mote* (a spot), — and worked it out to its ultimate consequences, so far as English is concerned. If his masters say *won't*, *sha'n't*, why should not he say *dasen't* ('dares not') and use it for

[1] The paper was originally printed in *Anglia* (Leipzig), 1884, and only portions were read before the Association. The Introduction, with an abstract of the contents of the paper, is here reproduced.

every person? If his master says, paroptically, *ínjīne* (so-called long *i*), why should not he say *ínjīne* (for 'éngĭne')? If euphemism so dominates the master that, in his oaths, he must say *dad blame* for something much stronger, why should not the Negro catch it and apply it analogically to a whole class of expressions (see Interjections)?

"Such parasynetic forms as *sparrer-grass* for *asparagus*, due to misunderstanding or misconception of a word, are common enough in Negro; but the African, from the absence of books and teaching, had no principle of *analepsy* in his intellectual furnishing by which a word, once become obscure from a real or supposed loss of parts or meaning, can be repaired, amended, or restored to its original form. He is continually led by analogies, and induced by classes of words like *gift*, *lift*, to add, for example, a *t* to *cliff*, if indeed he can be got at all to pronounce this, to him, very difficult final dental.

"The process of hybridization both in word-formation and in word-pronunciation (if one may so apply the term) is extensively practised by him; for not only have we such formations as *smartually* (smartly) and the like in Negro, but such pronunciations as *ailmént*, *presidént*, *obleege*, (caught from the Romance settlements in the South,) are common enough all over the South among white and black alike.

"The opposite principles of eduction and absorption are actively at work in the processes of Negro speech, giving rise on the one hand to such lengthenings and strengthened forms as corn*d*er, drown*d*ed, clos*t*, 'cross*t*, rous*t*, and on the other to such syncopations and contractions as *'spe'unce* (experience), *cu'ius* (curious), *mo'*, *'membunce*, &c.

"Numerous examples of aphæresis, apocope, syncope, epenthetic insertion, prothesis, epithesis, and metathesis have been collected and are given under these heads in their special section of this paper.

"What has been called *dimorphism* — a principle according to which a word may appear in the course of time under two forms — is not without suggestive illustration in Negro; e. g. the word *admiration* has not only its usual meaning, but, in the form 'to make a great *'miration*,' has gone back to its early meaning of wonder, astonishment; *up* is made to do the duty of a verb in such expressions as 'he *up* en duz'; *allow* comes to signify, additionally, *maintain*, *insist*; *parade* ('perrade') means also *walk*, etc.

"The fertility of the Negro dialect, indeed, is really wonderful, not only in the ingenious distortion of words by which new and startling significance is given to common English words (e. g. a *hant* in Negro means a *ghost*), but more especially in the domain of imitative sounds, cries, animal utterance. To the Negro all nature is alive, anthropomorphized, replete with intelligence; the whispering, tinkling, hissing, booming, muttering, 'zoonin,' around him are full of mysterious hints and suggestions, which he reproduces in words that imitate, often strikingly, the poetic and multiform messages which nature sends him through his auditory nerve. He is on intimate terms with the wild animals and birds, the *flora* and *fauna* of the immense stretches of pine woods among which for generations his habitation has been pitched. His mind is yet in the stage in which ready belief is accorded to the wrangles of shovel and tongs, the loves and hates of dish and platter on the kitchen shelves, the naïve personification of the furniture of his cabin; and for him rabbits and wolves, terrapins and turtles, buzzards and eagles, live lives no less full of drama and incident, of

passion and marvel, than his own kith and kin gathered around the pine-knot or the hickory fire.

"The Negro passion for music and for rhythmic utterance has often been remarked; a Negro sermon nearly always rises to a pitch of exaltation at which ordinary prose accent, intonation, word-order, are too tame to express the streaming emotion within; the sermon becomes a cry, a poem, an improvisation; it is intoned with melodious energy; it is full of scraps of Scripture in poem form, and to say that it becomes an orgy of figures and metaphors sobbed or shouted out with the voice of Boanerges is hardly going at all too far. The sermon style naturally exerts a powerful influence on the style of ordinary life; so that it is not remarkable if the utterance and language of the household and the street are largely cast in a rhythmic mould. Nearly every Negro above the average is a hymn-maker, or at least co-operates with others in the production of hymns, songs, plantation rhymes, 'corn-shucking' glees, 'joubas,' and the like. He invents his own airs and tunes, which are often profoundly touching and musical; his sense of *Takt* is delicate, and in congregational singing his voice has a beauty and richness and justness which often exceed the best efforts of the trained choirs of the cities.

"In this paper the author has endeavored to give merely an outline of Negro language usage, — an outline far from exhaustive or immaculate, but which, he hopes, will attract the attention of better qualified linguists to a series of phenomena which are certainly not devoid of interest. A life-long residence in the Southern States of North America enables him to say that what is here given is at least approximately correct. It will perhaps be several generations before the American public school system has sufficiently penetrated the wilds of the Negro South to render what is here recorded obsolete."

This Introduction was followed by a tolerably exhaustive registration of the phenomena of Negro grammar, including phonetics (Negro treatment of the English vowels, diphthongs, and consonants), aphæresis, syncope, apocope; letters added prothetically, epenthetically, epithetically; metathesis. The chief rubrics of grammar were then systematically taken up, and the Negro manipulation of them was shown in very numerous examples: the articles, definite and indefinite; the noun (formation of plural and of the possessive case); the comparison of adjectives; the personal, emphatic, demonstrative, relative, interrogative, and indefinite pronouns; the numerals (cardinal, ordinal, multiplicative); the verb (regular and irregular); the auxiliary verbs (be, have, etc.); table of principal irregular (Negro) verbs, with numerous observations on peculiar Negro innovations, barbarisms, and corruptions; the adverbs, prepositions, prepositional phrases, and conjunctions; interjections (in which Negro was shown to be peculiarly rich); modes of address, with answers; Negro intensives, expletives, agglutinations; archaisms in Negro surviving from the Elizabethan and Jacobin usage of the early Virginia colonial settlers; and about twenty closely printed pages of representative Negroisms. The entire essay covered about fifty pages octavo.

The reading of portions of the paper gave rise to an interesting discussion, in which it was shown that many of these "Negro" corruptions and provincialisms were known also in New England and elsewhere in the Northern States.

Remarks were made upon the paper by Professor E. S. Sheldon,

Dr. B. W. Wells, Professor A. C. Merriam, Rev. Dr. W. H. Ward, Dr. C. P. G. Scott, and in reply by Professor Harrison.

13. A Study of Dinarchus, by E. G. Sihler, Ph. D., of New York, N. Y.

Even at the time of Dionysius of Halicarnassus, shortly before the beginning of the Christian era, the literary remains of the last of the Attic orators were almost buried under the dust of neglect, and he has not fared much better in later and more modern times. The paper aimed to gather together the data of Dinarchus's life in its professional and political aspects, noting particularly the favorable effect upon the orator's professional prosperity caused by the departure of Aeschines from Athens in 330 B.C. He certainly became a successful servant of Macedonian interests at Athens.

As a speech-writer, Dinarchus was an imitator, not only of Demosthenes, but also of Lysias and Hyperides; but his extant performances show him mainly as an imitator of the former. As regards that kind of imitation which consists in self-iteration and the transcription of passages considered finished and successful, it was shown that Dinarchus was by no means the only one who practised it. In his periods, Dinarchus does not essay symmetrical conformation, but, on the other hand, shows great awkwardness in excessive accumulation; anacolutha are met with which lead him into several cases of bad grammar, or rather lack of grammar. Opportunity for detailed analysis is further afforded in Dinarchus's use of emphatic position; of doubling for the effect of *πάθος*; of the slander and abuse of the bema, called by the ancient rhetoricians *σχετλιασμός*; and of *δεινότης λέξεως*, i. e. the choice of quaint or telling words and phrases. Fairly exhaustive tabulation of instances of the above features was essayed by the author of the paper.

The Association adjourned at 9.50 P. M.

NEW HAVEN, CONN., Thursday, July 9, 1885.

MORNING SESSION.

The President called the Association to order at 9.15 A. M.

The reading of papers was resumed: —

14. The Law Code of the Cretan Gortyna, by Professor A. C. Merriam, of Columbia College, New York, N. Y.[1]

Of the ancient laws of Crete, so famous in antiquity, our literary sources give us but meagre and fragmentary information, and that which has reached us is mainly concerned with the state polity. A year ago this month there was discovered on the site of the ancient Gortyna, one of the three great Cretan towns, an archaic Greek inscription engraved upon the inner surface of a circular wall of antique construction. The writing is arranged in twelve columns, each about

[1] Printed in full in the American Journal of Archaeology, Vols. I. and II.

five feet in height, and extending over nearly thirty feet of the wall in length. The columns contain fifty-three, fifty-four, or fifty-five lines each, written in *boustrophedon* style, beginning from the right, and, with the exception of some thirty or forty lines, it is almost complete. Its state of preservation is most remarkable after the lapse of some twenty-five centuries, and in length and fineness of engraving it is unprecedented among archaic Greek inscriptions.

Its contents introduce us to that branch of law which the Greeks inclined to attribute especially to the mythic name of Rhadamanthus, the rendering of justice as between man and man, defining the rights of individuals and their possessions, and the means of rendering them secure. It treats of the reclamation of slaves, and of freemen held as slaves, fines for rape and adultery, rights of the wife to her property in case of divorce or of second marriage, and its disposition at her death, regulations as to the exposure or bringing up of a child born after divorce, division of property to sons and daughters, the latter receiving one part in three after the sons are put in possession of the houses in the city, of their contents, and of the cattle not owned by the serf. Property goes to children, grandchildren, or to great-grandchildren; in default of these, to brothers of deceased, their children or their grandchildren; next to sisters, their children or grandchildren; then to collateral branches. The judge is to settle all disputes about the division of property, and three or more witnesses must be present at the division. During the father's lifetime a son cannot sell or mortgage any of his father's property, nor the father sell or lend that of his children or wife; but this must be kept intact, though the father manages the property. In case he marries a second time, the mother's estate reverts at once to the children. Then follow provisions relating to the status of children born of parents in different stations of life, and the responsibility of a master for the acts of his slave. The heiress (daughter or daughters without brothers) must marry the father's brother or his son, but the law is rather more lenient than at Athens, and several exceptions are provided for, especially upon the surrender by the heiress of a half of her estate; then her marriage is confined in most cases within the tribe. These enactments are most minute, and cover more ground than any other subject in the code. Regulations provide for cases of death while the individual is held as surety, or involved in some suit; also for limitation of gifts of a son to his mother, or husband to wife, or any person in debt or otherwise involved; for the purchase of property mortgaged or in dispute, the adoption of a son, and his rights and obligations, directions as to the judge's decisions, permission to heirs to give up the property of the deceased to creditors if they wish, and additional provisions in matters of divorce, gifts, and the management of the heiress's property. The code ends with the statement that the heiress may marry at twelve years of age, or older.

The language of the inscription is harsh and archaic Cretan Doric, and is frequently obscure by reason of its brevity, and the number of new words, or old words in new meanings. Its complete explanation is a matter of extreme difficulty, and has not yet been attained.

15. The Relation of the Πρόεδροι to the Πρυτάνεις in the Attic Senate, by Professor William W. Goodwin, of Harvard College, Cambridge, Mass.

There has been substantial agreement in late years among German scholars in the opinion that the institution of πρόεδροι as presiding officers in the Athenian Senate and Assembly dates from the early part of the fourth century B. C.; that in earlier times the ἐπιστάτης, chosen by the fifty Prytanes from their own number each day by lot, presided in both Senate and Assembly; while in the times of the orators this ἐπιστάτης chose each day by lot nine πρόεδροι, one from each of the ten tribes except his own, who presided in both bodies, choosing as their spokesman one of themselves, who was called ἐπιστάτης τῶν προέδρων. This view, which is based chiefly on Pollux, Onomast. viii. 96, is generally accepted by American scholars. Many distinguished scholars in England, however, have adhered to the opinion once universally held, which has much weaker support in ancient authorities, that each set of fifty Prytanes was subdivided into five sections of ten, each of which sections presided in both Senate and Assembly during one fifth part of each prytany (generally seven days), being then called πρόεδροι; and that each set of πρόεδροι chose a president, called ἐπιστάτης, from their own number, to be their spokesman. This latter view is found, for example, in Smith's Dictionary of Antiquities and Grote's History of Greece; and it survived the text of the last edition of Liddell and Scott's Lexicon (though it is modified in the errata).

It may not be a useless work, therefore, to point out a method by which the truth of one or the other of these opinions may be settled by actual demonstration. If the latter view is correct, the presiding officer in the Senate and Assembly must always belong to the tribe which held the prytany at the time; while, on the other supposition, he must belong to this tribe in the earlier period before the institution of the πρόεδροι, but afterwards he must always belong to one of the other nine tribes.

In the *Corpus Inscriptionum Atticarum* there are twenty-four inscriptions containing Athenian decrees passed between 378 B. C. (the first year when πρόεδροι are expressly mentioned) and 320 B. C., in which we can read the name of the tribe holding the prytany, and also that of the deme of the presiding officer. In none of these cases does the deme of the president belong to the tribe holding the prytany. The earlier inscriptions seldom give the deme of the president; but an inscription belonging to the year of Euclides (303–302 B. C.), published in the *Addenda* to the *C. I. A.*, Vol. II. 1, No. 1[b], contains two decrees of that year, in both of which the president's deme belongs to the tribe holding the prytany. There are no other inscriptions in the *C. I. A.* earlier than 378 B. C. in which the requisite data are to be found. This demonstration seems conclusive.

16. Fatalism in Homer and Virgil, by Professor W. S. Scarborough, of Wilberforce University, Wilberforce, Ohio.

Though the religion of the Greeks and Romans is many-sided and many-colored, with a multiplicity of divinities, sub-divinities, quasi-divinities, and allegorical deities or the so-called impersonations of moral forces, there does appear occasionally a manifestation of a belief in one supreme divinity. Homer and Virgil seem fully to recognize the supremacy of the father of gods and men (Hom. Il. i. 5, Od. vi. 187, 188, iv. 235–237). At the same time there are many passages in both poets where the supreme divinity appears to be subject

to a blind impersonal force called Fate. The term Fate (*μοῖρα, fatum*) is often ambiguous and variable in meaning; it is sometimes used of the will of the gods (Virg. Aen. iv. 614), and again of the power behind the gods (Herod. i. 91). Ὑπέρμορα refers to the misery brought upon himself by a mortal, for which the gods are not responsible. Sometimes *μοῖρα* or *fatum* is equivalent to *θάνατος*, or *mors*. In spite of this variableness of meaning of the terms designating the controlling force, a careful study of the poems shows that the religious tendency of the Iliad, Odyssey, and Aeneid is decidedly fatalistic, as we use the term. (Compare especially Virg. Aen. i. 39, iv. 360, vii. 255, 584; Hom. Od. v. 41, 42.)

17. The Gothic Bible of Ulfilas, by Rev. Dr. C. K. Nelson, of Brookeville Academy, Brookeville, Md.

After calling attention to the importance of translations of the Bible in philological research, the speaker remarked upon the unique position of the Bible version of Ulfilas, the only considerable relic of the Gothic language in existence. The place of this work in the history of the Goths, and its relation to an earlier stage of the language, were briefly discussed. The life, works, learning, and influence of Ulfilas, the several manuscripts of his translation existing in a fragmentary condition, and the present state of the text, were topics duly passed in review, and the Gothic version of the Lord's Prayer was read as an illustration, not only of the language, but also of Ulfilas's manner of interpretation.

This preliminary survey was followed by a brief sketch of the subsequent fortunes of the Goths and of their tongue, and by a detailed discussion of the position of Gothic among the other Teutonic languages, in which — while comparisons were instituted — its peculiarities in phonetics, accidence, word-formation, syntax, etc. were illustrated by numerous examples.

18. The *siṣ* and *sa* Aorists, or the Sixth and Seventh Forms of Aorist in Sanskrit,[1] by Professor W. D. Whitney, of Yale College, New Haven, Conn.

The object of this paper was to set forth with all attainable completeness the facts of the occurrence of these forms of aorist in the Sanskrit language. As compared with the other two forms of sibilant or sigmatic aorist (the *s*-aorist and the *iṣ*-aorist), they are only quite exceptionally met with. In the whole body of the Sanskrit literature are found 145 *s*-aorist stems, and 174 *iṣ*-aorist stems; but of the two forms here especially in question, less than a score each.

Forms of the *siṣ*-aorist are made in the Veda from six roots (from three of them, only a single form each): namely, from 2 *gā* 'sing,' 1 *yā* 'go,' 1 *hā* 'leave,' *pyā*, *ram*, and *van*; in the Brāhmaṇas and later, from *jñā* in several forms, with sporadic single forms from *jyā*, *dhyā*, *bhuj*; in the latest language only, one form from *mnā*. Then besides, of forms (2d and 3d sing. active) which admit of reference to either the *siṣ* or the *s*-aorist, there are single cases in the Brāhmaṇas from *drā*, *vā*, and *hvā*, and in the later language from *glā*, *dhmā*, *nam*, *pā*, and *mlā*. To sum up, forms referable with more or less certainty to the *siṣ*-aorist are quotable in Sanskrit from nineteen roots: in the oldest period of the language (Rig-Veda), from two only; in the later Veda and in the

[1] It is printed in full in the American Journal of Philology, Vol. VI. pp. 275–284.

Brāhmaṇa, from only two in more than single sporadic forms, from six others in single forms of unquestionable, and three of questionable character; finally, single examples from six roots in the later language alone, the forms of only one of them unquestionable. Only three roots show forms both in the earlier and in the later language.

It hardly admits of question what is to be inferred from these facts. The first *s* of the tense-sign *siṣ* is an adscititious sibilant added to the root — from which, then, as thus increased, is made the ordinary *iṣ*-aorist. The adscititious *s* is probably that of the aorist itself: that is to say, an *s*-aorist stem has been made the starting-point of a new quasi-radical formation. Secondary roots with final sibilant are far from rare in Sanskrit; and while in some the *s* has been plausibly regarded as desiderative in origin, in others it is plainly aoristic, and in many more conjecturally of the same origin.

The whole *sa*-aorist formation, now, is in just about the same degree sporadic in its character as is the *siṣ*-aorist. It shows itself altogether in the same number of roots as the latter: namely, nineteen. Except from half a dozen roots (*duh*, *mṛj*, *mṛç*, *ruh*, *spṛç*, *vṛh*), it occurs only in a scattering form or two; and in the Rig-Veda it is made with any freedom from but two roots (*duh*, *mṛj*) The other roots from which it is quotable in more than one form are *vṛj* (?), *dviṣ*, *kṛṣ*, *kruç*, *guh*, *diç*, *viç* ; in a single form only, *druh*, *piṣ*, *mih*, *lih*, *dṛç*, *dih*. Five of these show forms both in the earlier and in the later language; the rest, in the earlier only. The formation is limited to roots having such a final consonant as combines regularly with the sibilant to *kṣ*, and having *i* or *u* or *ṛ* as medial vowel. All these things are indicative of an inorganic formation, fortuitously started, and carried but a little way in its development. The middle forms (made only from three roots) would admit of easy explanation as simple transfers to the mode of inflection of an *a*-stem — such as appear abundantly elsewhere, both in conjugation and in declension. In the active, however, the root-vowel of the *s*-aorist has the highest degree of strengthening (*vṛddhi*), while in the *sa*-aorist it remains unchanged: thus, *s*-aorist *adhāikṣām*, *sa*-aorist *adhikṣam* ; and this appears at present an insurmountable obstacle to the identification of the two forms. But it may not always continue so, when the mechanism of the strengthening comes to be fully understood. At any rate, all indications seem to point toward an accidental origin for the sporadic forms of this aorist, and so to shut them out from any important part in the investigation of the history of the sigmatic aorist.

There remain, then, as the true factors in Sanskrit with which we have to work in studying that history, the *s*-aorist and the *iṣ*-aorist, and these alone. In respect to the sibilant, and to its occurrence without or with a preceding *i* (even to the isolated exception of the long *ī* of root *grah*), this aorist-formation agrees with the *s*-future and with the desiderative. Until good evidence to the contrary can be shown, these three must be regarded as related formations; and no explanation can be accepted as satisfactory for one of them which does not apply also to the others.

19. The Feminine Caesura in Homer, by Professor T. D. Seymour, of Yale College, New Haven, Conn.

The importance of the caesura in the third foot of the Homeric hexameter is doubted by no one. According to Lehrs, this caesura is lacking in only 219

verses of the Iliad and in 95 of the Odyssey (e. g. *διογενὲς Λαερτιάδη πολυμήχαν' Ὀδυσσεῦ*). But in this third foot the principal pause falls sometimes after the ictus syllable, and sometimes between the two short syllables. Which is the normal pause, the catalectic or the trochaic close, the masculine or the feminine caesura? Scholars should be agreed as to which is the more frequent; but strange misapprehensions have long and widely prevailed. An examination shows that the feminine caesura is distinctly more frequent than the masculine caesura in the Homeric poems, the ratio in some cases, as in the first book of the Odyssey, being 3 to 2. This is true also in the Homeric hymns, and in the early elegiac poets. A slight investigation shows that the difference between the earliest and the latest Greek hexameters, as regards caesura, is not so great as Hermann thought, and not nearly so great as the difference between the verse of Homer and that of Virgil. But can we ascertain which caesura was preferred by the poet? for the poet may have preferred a form of verse which the material of the language did not allow him to use so frequently as some other form.

A mechanical argument may be drawn from the oft-repeated tags of verses which are arranged to fill up the latter half of the line. Metrical convenience and necessity often determined the choice between synonymous words or phrases, as between *ἔμμεναι* — ∪ ∪, *ἔμεναι* ∪ ∪ —, *ἔμμεν* — ∪, *ἔμεν* ∪ ∪, and *εἶναι* — —; or between the epithets of Apollo, *ἕκατος* ∪ ∪ —, *ἑκηβόλος* ∪ — ∪ ∪, *ἑκάεργος* ∪ ∪ — ∪, *ἑκατηβόλος* ∪ ∪ — ∪ ∪, or *ἑκατηβελέτης* ∪ ∪ — ∪ ∪ —. We may expect the same to be true of the epithets of the hero of the Iliad, and we actually find,

Nom. *ποδάρκης δῖος Ἀχιλλεύς.*
Gen. *ποδωκέος Αἰακίδαο.*
Dat. *ποδάρκεϊ Πηλεΐωνι.*
Acc. *ποδωκέα Πηλεΐωνα*, or *Ἀχιλλῆα πτολίπορθον.*

It is impossible to discover any special difference of meaning which led the poet to say *Αἰακίδαο* rather than *Πηλεΐωνος*. The ground for the choice lay in the necessities of the verse. We need not hesitate to say that *Ὀδυσσῆος θείοιο* is the genitive of *πολύτλας δῖος Ὀδυσσεύς*, that *Ἀχαιῶν χαλκοχιτώνων* is the genitive of *ἐυκνήμιδες Ἀχαιοί*, and that the poet seldom chose between *ἐυκνήμιδες Ἀχαιοί* and *κάρη κομόωντες Ἀχαιοί*, for other reasons than that the one clause could not follow a final consonant, while a final consonant was preferred before the other clause.

A rough count (aided by Schmidt's *Parallel-Homer*) shows that nearly 200 tags fitted to follow the feminine caesura are repeated each five times or more, in all 1932 times; 58 of these tags are repeated each ten times or more, in all 1090 times. 72 tags fitted to follow the masculine caesura are repeated each five times or more, in all 818 times; 27 of these tags are repeated each ten times or more, in all 539 times. Or, in other form:—

	Feminine Caesura.	Masculine Caesura.
(5)	197 tags, 1932 verses.	72 tags, 818 verses.
(10)	58 " 1090 "	27 " 539 "

Other counts might give a slightly differing result, for some tags may have escaped observation. But this count has included for safety's sake all phrases which are thus repeated; if from these we subtract all clauses which in their

nature cannot stand alone, like ἀμείβετο δῖα θεάων, προσέφη πολύμητις Ὀδυσσεύς, we have a corrected result as follows: 179 feminine tags, occurring 1475 times; in Iliad 871, in Odyssey 604. 47 masculine tags, occurring 376 times; in Iliad 211, in Odyssey 165. The count is accurate enough, however, to show a decided preference for tags to follow the feminine caesura; and since many of these conventional clauses were clearly part of the poet's inheritance from previous generations of bards, we may infer that the feminine or trochaic caesura not only was preferred by Homer, but was also an important characteristic of the earliest Greek hexameter. Nonnus was following in the main Homeric precedent when he established a norm of abundant dactyls and feminine caesuras.

The tags to follow the hephthemimeral caesura alone (i. e. which do not extend to the caesura of the third foot) are not numerous or important. The tags to follow the bucolic diaeresis are so numerous and so oft repeated as to settle all doubts as to the importance of that pause.

Remarks were made upon the paper by Professors A. C. Merriam, W. D. Whitney, W. W. Goodwin, C. R. Lanman, M. L. D'Ooge, and L. S. Potwin, and in reply by Professor Seymour.

Professor Goodwin withdrawing, the chair was taken by one of the Vice-Presidents, Professor A. C. Merriam.

20. Critical Miscellany [Eur. Suppl. 1049; Herod. viii. 124; Dinarch. c. Dem. 28, and c. Aristog. 15; Thuc. i. 50. 1, and ii. 37. 1; Plutarch. Vit. Lycurg. 13. 5; Xen. Anab. several passages], by E. G. Sihler, Ph. D., of New York, N. Y.

Eur. Supp. 1049, read ὑπεκβᾶσ' ἦλυθες for the MSS. ὑπερβᾶσ' ἦλυθες.

Herodotus viii. 124, insert ἀνδραγαθίης, reading ἀριστήϊα μέν νυν ἔδοσαν ἀνδραγαθίης Εὐρυβιάδῃ ἐλαίης στέφανον

Dinarchus c. Dem. 28, μισθωτὸς οὗτος, ὦ Ἀθηναῖοι, μισθωτὸς οὗτός ἐστι: bracket second οὗτος. — c. Aristog. 15 read τοιοῦτον for the MSS. τοῖς τοῦτον: after ὃς ἀγαθὸν μὲν ὑμᾶς πεποίηκεν οὐδὲ πώποτε, add οὐδέν.

Thuc. i. 50. 1, read πρὸς δὲ τὸ τοὺς ἀνθρώπους ἐτράποντο φονεύειν, inserting τό. — i. 37. 1, read ἥκειν for οἰκεῖν.

Plutarch Vit. Lyc. 13. 5, remove πόλλακις from its position before ἀμύνεσθαι, and let it precede ἐπὶ τοὺς αὐτοὺς πολεμίους.

Xen. Anab. i. 1. 8, ὧν Τισσαφέρνους ἐτύγχανε defended. — i. 4. 15, bracket μόνοις πειθομένοις. — i. 5. 11, read τῶν τε Μένωνός του στρατιωτῶν, with Hertlein. — i. 8. 15, πελάσας of A B C to be preferred. — i. 8. 16, bracket Κλέαρχος. — ii. 6. 29, bracket στρατηγῶν. — iii. 2. 10, read παρὰ τοὺς ὅρκους λελύκασι. — iii. 2. 26, read τοὺς νῦν σκληρῶς ἐκεῖ βιοτεύοντας . . . πλουσίως ὁρᾶν. — iv. 4. 14, read ὑπὸ ἀτασθαλίας. — Following are believed to be original emendations: i. 9. 8, αἱ πόλεις αἱ ἐπιτρεπόμεναι. — i. 9. 10, ὅτι οὐκ ἄν ποτε φίλους προοῖτο. — i. 10. 10, ὥσπερ ὅτε τὸ πρῶτον. — iii. 2. 34, either ἀκούσαθ' ὧν προσδεῖν μοι δοκεῖ, or προσδεῖν δοκεῖ μοι. — iv. 6. 13, μένοιεν γὰρ ἂν αὐτοῦ.

21. On the Affinity of the Cheroki to the Iroquois Dialects, by Albert S. Gatschet, Esq., of the United States Bureau of Ethnology,

Smithsonian Institution, Washington, D. C.: read by Professor C. R. Lanman, of Harvard College, Cambridge, Mass.

THE LANGUAGES OF THE CHEROKI AND IROQUOIS RELATED TO EACH OTHER.

To trace racial kinship through the affinity of language has always been a favorite mode of investigation with ethnologists. The proof of racial affinity hereby furnished is not absolutely sure and incontrovertible; but it is infinitely more safe than the one resting on similarity or identity of legal institutions, customs, or religious ideas, all of which are of a comparatively late origin. Frequently the linguistic material available is of a precarious quality, intensively and extensively, and this is the chief hindrance impeding progress in this line of research; for American languages, reliable dictionaries and grammars have come to hand in more recent times only.

A common origin for the Cheroki language and the numerous Iroquois dialects had been surmised by Dr. Barton as early as 1797 ("New Views," reprinted in 1798, with additions), and upheld by Albert Gallatin in his "Synopsis of the Indian Tribes" (in Archaeol. Americana, Vol. II. 1836); but none of these authors arrived at a final decision upon this problem. Barton also assumed genealogic connections between the most heterogeneous North American languages, and thus greatly weakened his arguments bearing upon the affinity of Cheroki and the languages of the Six Nations. The reason why he and the far-seeing, philosophic Gallatin did not come nearer the truth chiefly lay in the absurd and preposterous phonetic alphabet in which the majority of the vocabularies passing through their hands were worded. The mode of transcription used in them was the so-called "historic" English alphabet; homophonies are often produced by it where there are none in reality, and discrepancies obscuring the common origin of other terms. Neither was at that time any attention paid to the fact, that, in illiterate languages like those of the American natives, *one* and the same term may be *correctly* pronounced in six, ten, or twelve different ways, on account of the alternation or permutability of certain sounds, as we see it done in the Greek *θάλασσα* from *ταράσσειν*, or in Latin *meridies* for *medidies* (*medius dies*). For successfully comparing vocables belonging to different languages, it is extremely important to observe this phonetic law.

Mr. Horatio Hale was the first to establish on scientific principles the fact that Cheroki and Iroquois belong to the same linguistic family. In his article, "Indian Migrations as evidenced by Language" (Amer. Antiquarian, 1883, January, April, 27 pages), he established this connection, not on lexical data only,[1] but also, and more firmly, on grammatic grounds. Many more of both may be found out and brought to bear on the question by individuals fully conversant with one or several of the dialects involved. Gallatin states: "There is a similarity in the general termination of syllables, in the pronunciation and accent, which has struck some of the native Cherokees." Mr. Hale was enabled to arrive at his result only by possessing better and fuller information on both branches (especially on New York Iroquois and Huron) than that which had been previously published.

[1] Three words of his comparative list are adduced on sound resemblance only, not on real identity: *woman*, *boy*, *girl*.

With a view to examining the merits of Mr. Hale's article, the author of the present treatise set himself to comparing the collections of four Iroquois dialects, and of Cheroki verbal forms and vocables, made by himself with the aid of Indians, and to which he could implicitly trust concerning the important factor of *phonetics*. It will be well to remember that there are at present known to exist *four main branches* of Iroquois dialects, to be summarized in the following synopsis: —

A. *Huron*, formerly north of Lakes Ontario and Erie, and subdivided into (1.) the Tobacco Nation, Quatoghies, or Huron Proper, and (2.) the Wandót, who were in later times settled around Detroit, Mich., and Sandusky, Ohio, and lastly removed to Kansas and the Indian Territory, northeastern corner.

B. *Five Nations*, or *Iroquois Proper*, in Northwestern New York. The tribes extended from east to west in the following order: Mohawks, Oneidas, Onondagas, Cayugas, and Senecas. All the Mohawk Indians have emigrated to Canada.

C. *Tuskaróra*, before 1720 or 1722 residing on Neuse and Tar Rivers, North Carolina, now near Buffalo, N. Y., and on the Brantford Reserve, Canada. A tribe affiliated to them were the Nottoways, in Southeastern Virginia.

D. *Cheroki*, with various sub-dialects, which are still spoken in their *old* homes, — the mountain tracts of Tennessee, North Carolina, and Georgia, — though five sixths of the people have emigrated over fifty years ago to the west of the Mississippi.

The collections made by the author comprise a few Iroquois dialects only, and are not very extensive; but they fully suffice to confirm and to amplify considerably the results laid down in Mr. Hale's article. Ten of the terms compared by Mr. Hale were incorporated into the list below, in which the abbreviations are as follows: —

C. Mohawk of Caughnawaga, near Montreal.
Cher. Eastern or Mountain Cheroki, N. C.
M. Mohawk of Brantford, Province of Ontario.
S. Seneca, State of New York.
T. Tuskaróra, or, as they abbreviate their tribal name, Skarúrĕ.
W. Wandót, commonly called Wéyandot, Indian Territory.

I now proceed to the enumeration of the lexical coincidences observed by me between Cheroki and the Iroquois dialects of the three branches (Huron, Iroquois Proper, Tuskaróra), after which is to follow a list of the phonetic and morphologic congruencies. The Cheroki word is placed at the head of the items throughout, before a semicolon. The terms are arranged after categories, as parts of the animal body, animals, plants, numerals, etc. In investigations of this kind grammatic affinity is of greater weight, however, than resemblances of words.

I. Lexical Affinity.

Cher. kanoχká, abbrev. kan'ká, 'tongue'; kanaχsáke, 'my tongue,' C. Cf. handá'hsha, 'tongue,' W.

kayáˢsa, 'nose,' kayaˢsóli, 'his nose'; huniû'ˢsa, M.; 'niusa, C.

kanóge, 'arm'; kanä'ˢshut, S. Cf. unû'ˢdsha, M.

askó, uskó, 'head,' and ustié'hkai, 'his hair'; uskuára, 'hair,' W. Head and

hair are very frequently derived from the same radix in Indian and other languages: Latin *capillus*, from *capit-lus*, Greek κεφάλαιον.

ulasi'hténi, 'his foot'; u'hsítā, 'his foot,' M.

kanäká, 'skin' (of men, animals); gané'hm, C.

una'hwí, 'heart'; probably of the same origin as awéri, awéli, 'heart,' in M. and C. Compare, as to phonetics, Cher. únale, 'wind,' with owéra, howéra, 'wind,' in M.

ayelá^{n}-i, 'his body'; uyerû'^{n}ta, 'his body,' M.

akeyá^{n}like, 'old' and 'old person'; yukayú^{n}, 'old,' chiefly said of inanimate things, M.

ákskani, 'left,' 'on left side'; skenekuáti, C., 'skatkwadígwa, S.

katóχka, 'tail'; kataχsháki, C.

kanoskī'ski, 'thief'; hanä^{n}skuáha, 'thief,' W., kanû'ng'hskwa, 'to steal,' M.

yóna, 'bear'; anióyä^{n}, W. The French called the Mohawk Indians *Agniers*, after an Iroquois term for 'bear.'

á'hwi, 'deer,' á'hwi ékwa, 'elk,' viz. 'large deer'; ákwä, 'deer,' T.

ókana, 'ground-hog'; ukuntsisyúhi, or the 'white-faced,' W.

tsī'skwa, 'bird,' generic term; tsī't'ha, C.; tchítang'ha, M.

tíne, téne, 'louse'; utsínu, C.

tálu, 'oak'; ráru, 'white oak,' T.

úhiala, uhialúga, 'bark' (of plants); uyará, 'inner' or 'fibre bark,' W.

utsíla, 'flower,' utsilasá-i, 'flower,' when still on the plant; udsī'dsha, 'flower,' C.

ná^{n}ya, 'stone,' 'rock,' na^{n}yóhi, 'rocky'; onä'ya, 'stone,' M.

aguena^{n}sá-i, 'my home,' kanú^{n}sa, M., yenó^{n}sha, 'house,' W.; yanu'hshá-ä, 'lodge,' W. Occurs also in Cher. ganstá, ka^{n}stá, 'stick,' 'pole,' the Indian lodges being set up upon sticks.

kaní, gáni, 'arrow'; káno^{n}, S., and in kayä'^{n}kwire, C., gayû'^{n}kwire, M., 'arrow.' All these terms contain the radix or base *kan-* of the terms contained in the previous item ('house'), also of Cher. kanúnwa, 'pipe'; kanú^{n}nawa, 'tobacco-pipe,' M.

ö'ntsi, ü'^{n}tsi, 'snow'; óniete, C., unié'hte, M.

áma, amá, 'water,' amáyi, 'at, in the water'; áwě, 'water,' T.; amä'-iye, amáye, 'on the water,' W.

ónati, 'milk'; onû'ngua, S.

á^{n}tali, 'lake'; kaniátara, 'lake' and 'river,' 'expanse of water,' also 'ocean,' M.

talúkiski, 'iron,' 'tin'; *tal-* corresponds to *kal-* in kalíshtadsi, 'iron,' M. and C. Cf. kashtí, 'steel,' C.

atsíla, 'fire'; ö'dsile, ü'tsire C., ö'tchire M., utsī'shta W., 'fire.' The latter term appears in the Cher. udsī'stli kanö'ska, 'living coals' (kanö'ska, 'coal'), and utsola'hita, 'soot.'

ná^{n}to, 'sun,' 'moon'; núta in núta-uhä'ha, 'sunrise,' W. Probably also in yándisha, 'sun,' 'moon,' W.; and yátu in yátu-wats'hút'hu, 'sunset,' C.

galú^{n}lahi, galúnsa^{n}ti, 'sky,' 'on high'; karúnhia, M., C., tekaroniá^{n}te, 'sky,' W.

sunā'le, 'morning' and 'to-morrow'; cf. surawéye, 'in the forenoon,' W.

sanóyi, 'night'; usanhéya, 'evening.' Here *san-* corresponds to *sun-* in ashû'^{n}ta C., a'hsuntángne M., ewa'hsuntéye W., 'night.'

unéga-i, unéka, 'white'; undinié, W.

ékwa, 'large'; kówa, ko-u-ána, 'large,' 'great,' M. and other Iroq. dialects. The Cher. term occurs in Cher. ékwoni, 'river,' which stands for ékwoni áma, 'large water.'

sákwĕ, 'one' (*sa-* in the decades 11, 21, 31, etc.); 'nskă, M.

híski, 'five'; wíssk, u-isk, M. and other dialects.

The thoroughly *concrete* signification, and the large number of the terms compared, are a sufficient guarantee that they do not represent *words borrowed* from other languages, but that, in Cheroki as well as in Iroquois, they belong to the original, independent stock of vocables pertaining to one common linguistic family.

II. Affinity in Grammatic Elements.

Phonology. — The curious fact that the Iroquois dialects do not possess the sounds *b*, *p*, *v*, has already been observed by the earlier French missionaries. *F* is wanting also, for the *f* of Tuskaróra is not a real *f*, but should be written *w'h*; *m* appears only in a few dialects, and in Seneca it is difficult to distinguish it from *w* on hearing. Another labial, *w*, occurs in all dialects, and alternates with *u* and with a spirant commonly written *ȣ*, *ȣ*, or *ω*; it also occurs in the Algónkin dialects. Nearly the *same* remarks may be made concerning the labials in Cheroki. *B*, *p*, and *v* do not exist; *f* is very rare, and adulterine also; but *w* is clearly distinguished from *m*. This aversion for labial sounds occurs nowhere east of Mississippi River, and forms a strong argument in favor of the affinity between Cheroki and the Iroquois dialects.

Morphology. — The verbal forms of the languages under discussion are so perplexing through their great number and variety, that for the present I have selected only a few for comparison, which mainly refer to nominal, not to verbal, inflection.

1. Terms designating the parts of the human and animal body show a prefix *ka-*, *ga-*, in both branches, which seems to represent a possessive prefix, — 'somebody's' (cf. 'tongue,' 'nose,' 'arm,' etc.). In the Iroquois dialects *u-*, *ku-* is sometimes found instead.

2. A Cheroki prefix *te-* forms the plural of certain nouns: tlúχka-i, 'tree,' pl. tetlúχka-i; kátusi, 'mountain,' pl. tekátusi. The same particle, *te-*, *de-*, serves to indicate that the action of the Cheroki transitive verb extends to more than one object:

galá-iha, 'I tie' one object; tegalá-iha, more than one object.
tsígia, 'I take' one object; tetsígia, detsígia, more than one object.

In Mohawk the suffixed syllable *-ti* forms the plural pronominal object in several combinations (Cuoq, Études Philologiques, p. 118):

sakoti, 'they them' ('they' masc.).
yakoti, 'they them' ('they' fem.).
ko^{n}wati, ro^{n}wati, 'one they' (French *on eux*).

In Cheroki we find *te- prefixed* in the same function: te-awka, 'he us'; te-gihya, 'thou them'; te-yawka, 'they us' (H. Hale, Antiq., 1883). The nominal dual in Mohawk, which originated from the numeral tékeni, 'two,' is perhaps of similar origin, but suffixes *-ke* at the end of the term: kanú^{n}sha, 'house'; tekanu^{n}sáke, 'two houses'; nikano^{n}sáke, 'houses.'

3. Cheroki, as well as Iroquois, possesses a personal conjugation for the dual in the transitive and in the intransitive verb. Herein they probably differ from all Indian tongues spoken east of Mississippi River, for the majority of North American languages possess a dual in the intransitive verb only, and only *one* form for all the three persons.

4. Add to the above the grammatic paradigm of 'I alone,' 'thou alone,' etc., and that of the combined subject- and object-pronouns given in Mr. Hale's article. Several of the dialectic changes relative to phonetics are also pointed out there.

At first sight Cheroki appears wholly distinct from Tuskaróra, Wandót, and the Iroquois dialects; but the more comparisons are made between them, the more their original kinship becomes apparent. The recognition of this common origin will have its effects in setting forth unexpected ethnologic connections between the Southern and Northern branches, which in historic times were always involved in mutual warfare, and seemed wholly bent on exterminating each other.

22. On Positions of the Larynx in Vowel Articulations, with Remarks concerning Bell's "Visible Speech," by Professor Samuel Porter, of the National Deaf-Mute College, Washington, D. C.

The larynx is so connected with the hyoid bone and the root of the tongue that its position must change with changes in the action and position of the tongue, and may thus be regarded as having no direct agency in vowel formation, but as related thereto only in a secondary and incidental way. Observations made in a few instances by the writer show a considerable want of uniformity as among different individuals, to be accounted for, doubtless, in part, by differences in the natural shape and structure of the organs, — the concavity of the palate, for instance, which varies greatly in different persons; besides the fact that the same vowel may be given by organic positions differing within certain limits.

In the majority of the cases examined, the larynx was drawn forward and depressed for the vowels *ee* (in *eel*) and *oo* (in *too*), and receded and rose higher for other vowels. In one individual with a nearly flat palate, the change in this direction, in passing from *ee* to the *a* in *ale*, and again from that to the *a* in *air*, was most strongly marked. The explanation is this. In each of these three vowels there is an approximation, or constriction, between tongue and palate, giving a resonant cavity behind and before, — the one behind to be regarded as the more important. Both the part of the tongue behind and the part before the place of constriction are lower for the *a* in *ale* than for *ee*, and the connecting channel shorter; and still more so for the *a* in *air*, or the French *è* in *père*. The root of the tongue is thus thrust backward, and the larynx is thereby forced back, and by the action of the hyoid bone drawn upward.

Reference was made in this connection to the views of Mr. Schnyder, opposed to those of Bell, and reported by Professor Whitney to the Association in 1884. The speaker proceeded to advocate the adoption of the Bell vowel scheme in its leading features, and with its nomenclature, as a suitable basis on which to build a perfect system. He adverted to the prominence and precedence given by Bell to tongue positions; the division of these into back, front, and mixed;

the subdivision into high, mid, and low; and the division of these again into the narrow (a term substituted by Mr. Sweet for the "primary" of Mr. Bell), and the wide; — also to the labial rounding regarded as a superimposed modification.

Correcting the errors of Mr. Bell as to the *a* vowel, we may have the old triangular arrangement; but with two lines on each side, one for the narrow and one for the wide, diverging from two varieties of the *a;* and with the mixed on a vertical, or bisecting, line, into which would fall the English *u* in *up* and *e* in *fern*, and the French *eu* and German *ö*. Professor Porter spoke also of the French *u* and German *ü* as differing from *i*, and *eu* and *ö* from *e*, not merely by labial rounding, but as related to them very much as the English *ä*, etc., are to the back vowels; — though this could not be well represented on the triangular diagram without adding an appendage that would mar the symmetry of the figure.

The Association adjourned to 2.30 P. M.

NEW HAVEN, CONN., Thursday, July 9, 1885.

AFTERNOON SESSION.

The President called the Association to order at 2.30 P. M. A letter of thanks, from the New England Summer School of Hebrew, signed by Professors F. B. Denio and D. G. Lyon, and the Rev. S. H. Lee, as Committee, for the invitation to participate in the excursion of the preceding day, was laid before the Association.

The report of the Committee to nominate officers for the ensuing year was presented by Professor W. D. Whitney. In accordance with the recommendations of the Committee, the officers for 1885–86 were elected as follows: —

President, Professor Tracy Peck, Yale College, New Haven, Conn.
Vice-Presidents, Professor A. C. Merriam, Columbia College, New York, N. Y.; Professor Isaac H. Hall, New York, N. Y.
Secretary, Professor John H. Wright, Dartmouth College, Hanover, N. H.
Treasurer, Professor John H. Wright.

Additional members of the *Executive Committee*, —

Professor Basil L. Gildersleeve, Johns Hopkins University, Baltimore, Md.
Professor Charles R. Lanman, Harvard College, Cambridge, Mass.
Professor Francis A. March, Lafayette College, Easton, Penn.
Professor Bernadotte Perrin, Adelbert College, Cleveland, Ohio.
Professor William D. Whitney, Yale College, New Haven, Conn.

The report of the Committee on the next meeting of the Association was presented by Professor F. A. March. The Committee

recommended that the Association should meet at Ithaca, N. Y., on July 13, 1885, unless otherwise ordered by the Executive Committee.

The report was accepted, and the recommendations were adopted.

Professor Harkness reported, on behalf of the Auditing Committee, that the Treasurer's accounts had been examined and found correct. The report was accepted.

Professor March, as Chairman of the Committee on the Reform of English Spelling, presented the report.

The comittee has taken no action since the last report. The alfabetic list of words changed by the rules adopted in 1883, which it was hoped might be made by the comittee with the concurrence of the Philological Society of England, has not been completed. There has been no great activity among the frends of the reform in England. Reformers of spelling in Germany hav done better.

On motion the report was accepted, and the Committee appointed in 1875 was continued for another year. It now consists of Messrs. March (Chairman), W. F. Allen, Child, Lounsbury, Price, Trumbull, and Whitney.

23. A Comparison of Three Recensions of the Rāmāyaṇa, by Samuel B. Platner, Ph. D., of Newark, N. J.

Instead of one established text of the Indian epic, the Rāmāyaṇa, there are found several, each differing from the others to a greater or less extent. This state of things, quite unparalleled elsewhere, is as remarkable as it is perplexing to any one who attempts to study the text critically. These various forms of the poem, called Recensions, are found in various parts of India, and are each supported by manuscripts. In general these recensions agree in all the main points of the story, and correspond more often than they disagree in the divisions into chapters, etc.; but in the matter of words they differ very widely, while expressing often the same idea. There are also chapters in one recension which do not appear in the others, differences in the stories told, and in various points of mythology and nomenclature. Several causes, uniting to bring about this result, may be discovered. First, the Rāmāyaṇa after its completion by Vālmīki, was recited by bards, corresponding to the Greek Rhapsodists, throughout India, even after it had been reduced to writing. Any work orally current in this way is sure of being corrupted on account of the carelessness and forgetfulness of the bards. Secondly, these Rhapsodists would often feel inclined to add to or change some passage, as seemed best to themselves; and this result would be greatly facilitated by the enormous extent of the poem. The nature of its composition made the Rāmāyaṇa much harder to learn than the Iliad or Odyssey. A whole page of adjectives is often found, which could not possibly be preserved unchanged. In the third place, the great popularity which the Rāmāyaṇa achieved caused

the poem to become current over so large an extent of territory that this fact necessitated many important changes. This popularity was due, no doubt, in large measure, to the reward promised to every one who would read the poem through. The following verse is found in the first chapter: "Whoever reads this story of the doings of Rāma, which is pure and purifying, and equal to the Vedas, is released from all his sins." A fourth fact, which contributed to the gradual change of the poem, is that the manuscripts themselves were, in all probability, altered extensively by the learned men throughout India, who made changes continually to suit themselves. Naturally these changes varied in kind and amount, according to the various ideas current in different parts of the country. The intentional alterations far exceeded in number and importance those due to other causes.

There are now two, or possibly three distinct recensions, belonging to different parts of India. (1.) The Bengal Recension, so called from its existence in manuscripts written in Bengālī characters. This text has been given to the public in G. Gorresio's edition and Italian translation. Weber states that in the Berlin manuscripts of the Rāmāyaṇa he finds many parts in Devanāgarī characters, which correspond to Gorresio's text and lend it additional authority. (2.) The Northern Recension, which has been printed at Bombay, and goes by the name of the Bombay text. (3.) Schlegel's text of the first two books, another version of the Northern Recension, but by some called a separate recension.

The number of these recensions will very likely increase as new manuscripts shall be found, and the problem of discovering the original text will be made correspondingly difficult. The different styles of writing in various parts of the country, the different tastes and artistic ideas of different societies, all exhibit themselves in varying texts; and it is, as Weber remarks, quite wonderful that there is so much harmony and consistency as we actually find. The amount of resemblance between these three texts was first considered numerically. A number of chapters in the first book were picked out at random, compared word for word, and all the çlokas, lines, and Pādas which were exactly alike in all three texts noted down. Taking the very first chapter as an example, it is found that Schlegel's text has 95 çlokas, or stanzas of two lines, the Bombay edition 100, and Gorresio's 106. Of these, three çlokas are alike in all, or about 3%. Of equal lines there are 36, or 18%, and of equal Pādas, half-lines, there are 64, or 34%. Now comparing Schlegel's text with the Bombay and Gorresio's, separately, in the first case 30 çlokas which were alike were found, or 30%; 114 equal lines, or 58%; and 265 equal Pādas, or 68% of resemblance; while in Schlegel and Gorresio there are only 10 equal çlokas, 10%; 75 equal lines, 58%; and 201 equal Pādas, 50%. Considering Schlegel's text by itself, there were found only ten variations between it and both the others. Of these ten, nine were single words, while one extra line had been inserted. Following out this method through a number of chapters, it was found that, while the other relations varied considerably, the differences between Schlegel's text and both the others were very few and insignificant, and such as could be explained in almost every case as simple mistakes. This method of comparison shows that generally Schlegel's text is taken from the Bombay version, although sometimes it has more in common with Gorresio's text. Thus, in twelve chapters in the first book, on comparing Schlegel and the Bombay text together, it is found that 30% of the çlokas are

the same, 57% of single lines, and 69% of Pādas, while in Schlegel and Gorresio the corresponding percentages are 10, 29, and 41. In thirteen chapters compared thus numerically, only 1% of the whole number of çlokas were alike in all three texts, 10% of all the lines, and 26% of all the Pādas. The differences are seen to be quite considerable, and the tables of resemblances for separate chapters give very interesting results, owing to the great variations in the proportions. Besides the numerical relations, each Pāda was examined to see what results could be obtained, bearing upon the question as to the amount of authenticity which can be attributed to each recension in respect to priority in time and greater genuineness. It is perfectly plain that no one of the three recensions, as we know them, exhibits the true form of the original poem, and the only question is which is probably nearest to that original. The variations are frequently of a most tantalizing nature. It is impossible, in many cases, to say with any confidence whether a given difference is to be considered as intentional or accidental, when it might equally well be either. The whole matter seems often to resolve itself into a question of good guessing, in a manner quite exasperating. It is only the cumulative evidence, in such cases, which can be counted as having much weight, and fortunately there is plenty of such proof at hand.

As resulting from this examination of the three recensions, the following indications were mentioned, showing that the text of the Bombay edition had not been subjected to any critical revision, in the same manner as that of Gorresio's edition. (1.) The incompleteness of parts found in the Bombay text. By this it is meant, that a single idea or sentence is not limited to a natural and definite division of the verse, but frequently takes up some portion of another division. Thus it is found that new paragraphs, not closely connected with what precedes, begin at the second line of a çloka. This fact would not be so noticeable if it were not that Gorresio's text almost always avoids such usages. Even in the case of Pādas, Gorresio's text seems to attempt to make them as complete as possible in themselves. (2.) In the Bombay text çlokas occur with tolerable frequency, which contain six Pādas. No explanation of this fact was offered, but it was considered to be an evidence of crudeness and a lack of anything like revision. (3.) In the Bombay text chapters are found ending with single lines, instead of complete çlokas. This usage is of the same nature as the last, and to be considered in the same way. (4.) In the Bombay text we find changes in the number of verbs and nouns, made without regard to the demands of the context. Every inconsistency of this kind is carefully avoided in Gorresio. (5.) In the Bombay text are found inconsistencies in the use of tenses. Thus, futures and presents are used together, where propriety demands the use of one tense to the exclusion of the other. No place was found in Gorresio where an irregularity of this kind occurred. (6.) The Bombay edition is full of irregular and loose constructions, which are sometimes blind, and need Gorresio's text to make them clear. Then, there are many passages which, while not exactly loose or irregular, are greatly lacking in skill of construction, and suggest the style of the older language. In the grammatical usages are indications that the Bombay text is older than Gorresio's. There are more points of similarity with the older language, and much greater freedom in construction. Older words are used, which the Bengal revisers evidently thought it necessary to change into more familiar ones. (7.) In the Bombay text there occur unaugmented verb forms, of which usage no case has been discovered in Gorresio.

Thus, Bombay, I. 1. 59 çansat; I. 9. 6 samabhivartata; I. 66. 22 pīdyan, etc. (8.) In the Bombay text there occur irregularly formed gerunds, as I. 1. 65 utsmāyitvā; I. 1. 74 nivedayitvā; I. 1. 97 upāsitvā; I. 12. 22 visarjayitvā, etc. These are all carefully corrected in Gorresio. The case of tmesis found in Bombay I. 2. 29, *upa çlokam imam jagāu*, is probably unique, but nevertheless may be worth something in deciding upon the value of the different recensions. Such an anomalous construction as *gatānām teṣu vipreṣu*, Bombay I. 12. 22, would certainly not survive a revision.

This state of things indicates that Gorresio's text has been revised. It is supposed that the learned men in Bengal devoted more attention to the poem than it received elsewhere. *All* the indications of age and crudeness in the Bombay text are conspicuous by their absence from Gorresio. Often where in other respects a whole çloka is the same in both recensions, a single word will be changed to avoid some inconsistency, looseness, or irregularity, and this occurs so often that it is necessary to suppose intentional alteration. Besides the absence of all questionable expressions, Gorresio's text has the positive merit of greater artistic excellence, and more elegance in the combination of words. There is also a marked endeavor to make each passage as lucid as possible, and to avoid all abrupt and harsh transitions. This last fact accounts for many of the lines in Gorresio which do not occur in the Bombay text. The great increase in poetical grace will be evident to any one who will compare the two versions. There is, at the same time, more artificiality in Gorresio's verse than in the Bombay version, and a greater desire to produce striking effects. This is seen in the alliteration of the following line (Gorresio I. 1. 19):

sa satyaḥ sa samaḥ sāumyaḥ sa caika priyadarçanaḥ,

and in such compounds as Gorresio I. 1. 30:

rūpayāuvanamadhuryaçīlācarasamanvitā;

of which usage there are other instances. Gorresio also uses the aorist in the sense of an imperfect with more frequency than the other texts. In only four chapters, seven aorists occur in Gorresio, which do not appear in the others. In the use of vocatives, frequency of which is a mark of early origin, Gorresio's text is much more sparing than the Bombay. The insertion of such chapters as the fourth of the first book in Gorresio, which is merely a table of contents, is additional proof of lateness.

With reference to Schlegel's text very little more needs to be said. It does not deserve to be called a separate recension, as it is plainly nothing but a composite, made up by combining readings from Bombay and Gorresio. As was seen in the chapters where all the variations between Schlegel and both the other texts were noted, these differences were insignificant. Now and then a line is found in this text which has no correspondent elsewhere, but even these are always unimportant, and prove no third recension. The conclusion is, that, while it is not to be supposed that we have the original Rāmāyaṇa in a perfectly pure form, the version contained in the Bombay edition is very much nearer the original than that of Gorresio, and that Schlegel's text, while elegant, is critically almost valueless.

The following papers were read by title: —

24. Ancient Tunnels,[1] by Professor A. C. Merriam, Columbia College, New York, N. Y.

This paper was especially devoted to a description of the ancient tunnel and aqueduct, built probably by Polycrates, tyrant of Samos, about 525 B. C., and described by Herodotus as one of the three wonders of the island. It was intended for the introduction of the water of a copious spring north of the city, from which it was separated by a mountain seven or eight hundred feet high. Through this mountain a tunnel about three quarters of a mile in length was run, with a height and breadth of eight feet. The position of this tunnel was unknown to modern scholars until 1882, when it was discovered by the abbot of a neighboring monastery, and he interested the authorities of the island in an attempt to clear it out for present use. This was not completely successful, but enough was done to show that the statements of Herodotus were correct, even to the channel which he says was dug below the tunnel itself. It seems that the engineer constructed his tunnel first, and on bringing the water down to it, discovered that he had begun his tunnel at too high a level, and he was compelled to dig a conduit below it, some ten feet deeper at the upper end and thirty at the lower, in order to get the water into the city. The tunnel was run from both ends, and when the two sections arrived at the point of junction they were several feet distant from each other, vertically as well as laterally. Still, with the means at their command in that day, the work was a great engineering feat. This aqueduct was compared with others on the continent of Greece, and especially with that at Jerusalem, between the Virgin's Pool and that of Siloam, recently re-examined by Lieut. Conder in the interest of the Palestine Exploration Fund. This conduit was far inferior to the Samian in size, and in the excellence of the work.

25. The Philosophy of Lucretius, by the Rev. Dr. C. K. Nelson, of Brookeville Academy, Brookeville, Md.

The recent publication of Professor F. W. Kelsey's Lucretius was made the occasion of presenting a few thoughts on the philosophy of the poet. After briefly reviewing this edition, the writer said that Lucretius owed much to the terseness, vigor, and majestic sweep of the tongue in which it was his privilege to compose. The errors in the popular conception of Lucretius were adverted to, and the views of Sellar, Farrar, De Quincey, Mrs. Browning, and J. A. Symonds were quoted. The writer held that the poet, in an age of fearful moral corruption and darkness, himself of a profoundly religious temper, turned to nature for light; that he was nearer the truth than was Socrates; that his pantheism and agnosticism were not such as would be inconsistent with revealed religion; that his earnestness and conscientiousness and his quickness of sympathy were almost Christian in their depth; that he should be called the poet of progress, instinct with the germs of scientific and philosophic truth. The paper closed with a brief notice of some of the literary features of the poem, and of the peculiarities of the language of the author.

[1] Printed in full in the School of Mines Quarterly, New York, 1885.

On motion a resolution was adopted in substance as follows: —

The American Philological Association desires to express its hearty thanks to the President and Fellows of Yale College, for the use of Sloane Laboratory for the meetings of the Association, and for the invitation to visit other buildings under their care; also to the resident members of the Association, and to other citizens of New Haven, by whose liberality the excursion of Wednesday, July 8, was made possible.

The Association adjourned at about 3.30 P. M.

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New York, N. Y.: The College of the City of New York. (Lexington Ave. and 23d St.)

New York, N. Y.: Union Theological Seminary. (1200 Park Ave.)
Olivet, Eaton Co., Mich.: Olivet College Library.
Philadelphia, Pa.: American Philosophical Society.
Philadelphia, Pa.: The Library Company of Philadelphia.
Philadelphia, Pa.: The Mercantile Library.
Providence, R. I.: Brown University.
Providence, R. I.: Providence Athenæum.
Rochester, N. Y.: Library of Rochester University.
Sewanee, Tenn.: University of the South.
Springfield, Mass.: City Library.
Tuscaloosa, Ala.: University of Alabama.
University of Virginia, Albemarle Co., Va.: University Library.
Washington, D. C.: Library of Congress.
Washington, D. C.: United States Bureau of Education.
Waterville, Maine: Colby University.
Wellesley, Mass.: Wellesley College Library.
Windsor, Nova Scotia: King's College Library.
Worcester, Mass.: Free Public Library.

[Number of subscribing Institutions, 57.]

TO THE FOLLOWING LIBRARIES AND INSTITUTIONS HAVE BEEN SENT COMPLETE SETS (VOLUMES I.—XV.) OF THE TRANSACTIONS, GRATIS.

British Museum, London, England.
Royal Asiatic Society, London.
Philological Society, London.
Society of Biblical Archæology, London.
India Office Library, London.
Bodleian Library, Oxford.
Advocates' Library, Edinburgh, Scotland.
Trinity College Library, Dublin, Ireland.
Asiatic Society of Bengal, Calcutta.
Bombay Branch of the Royal Asiatic Society.
North-China Branch of the Royal Asiatic Society, Shanghai.
Japan Asiatic Society, Yokohama.
Public Library of Victoria, Melbourne, Australia.
Sir George Grey's Library, Cape Town, Africa.
Reykjavik College Library, Iceland.
University of Christiania, Norway.
University of Upsala, Sweden.
Russian Imperial Academy, St. Petersburg.
Austrian Imperial Academy, Vienna.

Anthropologische Gesellschaft, Vienna.
Biblioteca Nazionale, Florence, Italy.
Reale Accademia delle Scienze, Turin.
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Royal Bavarian Academy of Sciences, Munich.
Deutsche Morgenländische Gesellschaft, Halle.
Library of the University of Bonn.
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Library of the University of Tübingen.

[Number of foreign Institutions, 35.]

[Total, (279 + 57 + 35 =) 371.]

CONSTITUTION

OF THE

AMERICAN PHILOLOGICAL ASSOCIATION.

ARTICLE I. — NAME AND OBJECT.

1. This Society shall be known as "The American Philological Association."

2. Its object shall be the advancement and diffusion of philological knowledge.

ARTICLE II. — OFFICERS.

1. The officers shall be a President, two Vice-Presidents, a Secretary and Curator, and a Treasurer.

2. There shall be an Executive Committee of ten, composed of the above officers and five other members of the Association.

3. All the above officers shall be elected at the last session of each annual meeting.

ARTICLE III. — MEETINGS.

1. There shall be an annual meeting of the Association in the city of New York, or at such other place as at a preceding annual meeting shall be determined upon.

2. At the annual meeting, the Executive Committee shall present an annual report of the progress of the Association.

3. The general arrangements of the proceedings of the annual meeting shall be directed by the Executive Committee.

4. Special meetings may be held at the call of the Executive Committee, when and where they may decide.

ARTICLE IV. — MEMBERS.

1. Any lover of philological studies may become a member of the Association by a vote of the Executive Committee and the payment of five dollars as initiation fee, which initiation fee shall be considered the first regular annual fee.

2. There shall be an annual fee of three dollars from each member, failure in payment of which for two years shall *ipso facto* cause the membership to cease.

3. Any person may become a life member of the Association by the payment of fifty dollars to its treasury, and by vote of the Executive Committee.

ARTICLE V. — SUNDRIES.

1. All papers intended to be read before the Association must be submitted to the Executive Committee before reading, and their decision regarding such papers shall be final.

2. Publications of the Association, of whatever kind, shall be made only under the authorization of the Executive Committee.

ARTICLE VI. — AMENDMENTS.

Amendments to this Constitution may be made by a vote of two thirds of those present at any regular meeting subsequent to that in which they have been proposed.

PUBLICATIONS OF THE ASSOCIATION.

THE annually published "Proceedings" of the American Philological Association contain an account of the doings at the annual meeting, brief abstracts of the papers read, reports upon the progress of the Association, and lists of its officers and members.

The annually published "Transactions" give the full text of such articles as the Executive Committee decide to publish. The Proceedings are bound with them as an Appendix.

The following tables show the authors and contents of the first sixteen volumes of Transactions:

1869-1870. — Volume I.

Hadley, J.: On the nature and theory of the Greek accent.

Whitney, W. D.: On the nature and designation of the accent in Sanskrit.

Goodwin, W. W.: On the aorist subjunctive and future indicative with ὅπως and οὐ μή.

Trumbull, J. Hammond: On the best method of studying the North American languages.

Haldeman, S. S.: On the German vernacular of Pennsylvania.

Whitney, W. D.: On the present condition of the question as to the origin of language.

Lounsbury, T. R.: On certain forms of the English verb which were used in the sixteenth and seventeenth centuries.

Trumbull, J. Hammond: On some mistaken notions of Algonkin grammar, and on mistranslations of words from Eliot's Bible, etc.

VanName, A.: Contributions to Creole grammar.

Proceedings of the preliminary meeting (New York, 1868), of the first annual session (Poughkeepsie, 1869), and of the second annual session (Rochester, 1870).

1871. — Volume II.

Evans, E. W.: Studies in Cymric philology.

Allen, F. D.: On the so-called Attic second declension.

Whitney, W. D.: Strictures on the views of August Schleicher respecting the nature of language and kindred subjects.

Hadley, J.: On English vowel quantity in the thirteenth century and in the nineteenth.

March, F. A.: Anglo-Saxon and Early English pronunciation.

Bristed, C. A.: Some notes on Ellis's Early English Pronunciation.

Trumbull, J. Hammond: On Algonkin names for man.

Greenough, J. B.: On some forms of conditional sentences in Latin, Greek, and Sanskrit.

Proceedings of the third annual session, New Haven, 1871.

1872. — Volume III.

Evans, E. W.: Studies in Cymric philology.

Trumbull, J. Hammond: Words derived from Indian languages of North America.

Hadley, J.: On the Byzantine Greek pronunciation of the tenth century, as illustrated by a manuscript in the Bodleian Library.

Stevens, W. A.: On the substantive use of the Greek participle.

Bristed, C. A.: Erroneous and doubtful uses of the word *such*.

Hartt, C. F.: Notes on the Lingoa Geral, or Modern Tupí of the Amazonas.

Whitney, W. D.: On material and form in language.

March, F. A.: Is there an Anglo-Saxon language?

March, F. A.: On some irregular verbs in Anglo-Saxon.

Trumbull, J. Hammond: Notes on forty versions of the Lord's Prayer in Algonkin languages.

Proceedings of the fourth annual session, Providence, 1872.

1873. — Volume IV.

Allen, F. D.: The Epic forms of verbs in *δω*.

Evans, E. W.: Studies in Cymric philology.

Hadley, J.: On Koch's treatment of the Celtic element in English.

Haldeman, S. S.: On the pronunciation of Latin, as presented in several recent grammars.

Packard, L. R.: On some points in the life of Thucydides.

Goodwin, W. W.: On the classification of conditional sentences in Greek syntax.

March, F. A.: Recent discussions of Grimm's law.

Lull, E. P.: Vocabulary of the language of the Indians of San Blas and Caledonia Bay, Darien.

Proceedings of the fifth annual session, Easton, 1873.

1874. — Volume V.

Tyler, W. S.: On the prepositions in the Homeric poems

Harkness, A.: On the formation of the tenses for completed action in the Latin finite verb.

Haldeman, S. S.: On an English vowel-mutation, present in *cag*, *keg*.

Packard, L. R.: On a passage in Homer's Odyssey (x. 81–86).

Trumbull, J. Hammond: On numerals in American Indian languages, and the Indian mode of counting.

Sewall, J. B.: On the distinction between the subjunctive and optative modes in Greek conditional sentences.

Morris, C. D.: On the age of Xenophon at the time of the Anabasis.
Whitney, W. D.: Φύσει or θέσει — natural or conventional?

Proceedings of the sixth annual session, Hartford, 1874.

1875.—Volume VI.

Harkness, A.: On the formation of the tenses for completed action in the Latin finite verb.
Haldeman, S. S.: On an English consonant-mutation, present in *proof, prove*.
Carter, F.: On Begemann's views as to the weak preterit of the Germanic verbs.
Morris, C. D.: On some forms of Greek conditional sentences.
Williams, A.: On verb-reduplication as a means of expressing completed action.
Sherman, L. A.: A grammatical analysis of the Old English poem "The Owl and the Nightingale."

Proceedings of the seventh annual session, Newport, 1875.

1876.—Volume VII.

Gildersleeve, B. L.: On εἰ with the future indicative and ἐάν with the subjunctive in the tragic poets.
Packard, L. R.: On Grote's theory of the structure of the Iliad.
Humphreys, M. W.: On negative commands in Greek.
Toy, C. H.: On Hebrew verb-etymology.
Whitney, W. D.: A botanico-philological problem.
Goodwin, W. W.: On *shall* and *should* in protasis, and their Greek equivalents.
Humphreys, M. W.: On certain influences of accent in Latin iambic trimeters.
Trumbull, J. Hammond: On the Algonkin verb.
Haldeman, S. S.: On a supposed mutation between *l* and *u*.

Proceedings of the eighth annual session, New York, 1876.

1877.—Volume VIII.

Packard, L. R.: Notes on certain passages in the Phaedo and the Gorgias of Plato.
Toy, C. H.: On the nominal basis of the Hebrew verb.
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March, F. A.: On dissimilated gemination.

Proceedings of the ninth annual session, Baltimore, 1877.

1878.—Volume IX.

Gildersleeve, B. L.: Contributions to the history of the articular infinitive.
Toy, C. H.: The Yoruban language.
Humphreys, M. W.: Influence of accent in Latin dactylic hexameters.
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Seymour, T. D.: On the composition of the Cynegeticus of Xenophon.
Humphreys, M. W.: Elision, especially in Greek.

Proceedings of the tenth annual session, Saratoga, 1878.

1879.—Volume X.

Toy, C. H.: Modal development of the Semitic verb.
Humphreys, M. W.: On the nature of cæsura.
Humphreys, M. W.: On certain effects of elision.
Cook, A S.: Studies in the Heliand.
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Peck, T.: The authorship of the Dialogus de Oratoribus.
Seymour, T. D.: On the date of the Prometheus of Aeschylus.

Proceedings of the eleventh annual session, Newport, 1879.

1880.—Volume XI.

Humphreys, M. W.: A contribution to infantile linguistic.
Toy, C. H.: The Hebrew verb-termination *un*.
Packard, L. R.: The beginning of a written literature in Greece.
Hall, I. H.: The declension of the definite article in the Cypriote inscriptions.
Sachs, J.: Observations on Lucian.
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Allen, W. F.: The battle of Mons Graupius.
Whitney, W. D.: On inconsistency in views of language.
Edgren, A. H.: The kindred Germanic words of German and English, exhibited with reference to their consonant relations.

Proceedings of the twelfth annual session, Philadelphia, 1880.

1881.—Volume XII.

Whitney, W. D.: On Mixture in Language.
Toy, C. H.: The home of the primitive Semitic race.
March, F. A.: Report of the committee on the reform of English spelling.
Wells, B. W.: History of the *a*-vowel, from Old Germanic to Modern English.
Seymour, T. D.: The use of the aorist participle in Greek.
Sihler, E. G.: The use of abstract verbal nouns in *-σις* in Thucydides.

Proceedings of the thirteenth annual session, Cleveland, 1881.

1882. — Volume XIII.

Hall, I. H.: The Greek New Testament as published in America.
Merriam, A. C.: Alien intrusion between article and noun in Greek.
Peck, T.: Notes on Latin quantity.
Owen, W. B.: Influence of the Latin syntax in the Anglo-Saxon Gospels.
Wells, B. W.: The Ablaut in English.
Whitney, W. D.: General considerations on the Indo-European case-system.

Proceedings of the fourteenth annual session, Cambridge, 1882.

1883. — Volume XIV.

Merriam, A. C.: The Caesareum and the worship of Augustus at Alexandria.
Whitney, W. D.: The varieties of predication.
Smith, C. F.: On Southernisms.
Wells, B. W.: The development of the Ablaut in Germanic.

Proceedings of the fifteenth annual session, Middletown, 1883.

1884. — Volume XV.

Goodell, T. D.: On the use of the Genitive in Sophokles.
Tarbell, F. B.: Greek ideas as to the effect of burial on the future life of the soul.
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Whitney, W. D.: Primary and Secondary Suffixes of Derivation and their exchanges.
Warren, M.: On Latin Glossaries. Codex Sangallensis, No. 912.

Proceedings of the sixteenth annual session, Hanover, 1884.

1885. — Volume XVI.

(*In Press.*)

Easton, M. W.: The genealogy of words.
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Goodwin, W. W.: Value of the Attic talent in modern money.
" " Relation of the Πρόεδροι to the Πρυτάνεις in the Attic Βουλή.
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Wells, B. W.: The vowels *e* and *i* in English.
Whitney, W. D.: The roots of the Sanskrit language.

Proceeedings of the seventeenth annual session, New Haven, 1885.

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OF THE

AMERICAN PHILOLOGICAL ASSOCIATION.

1885.

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